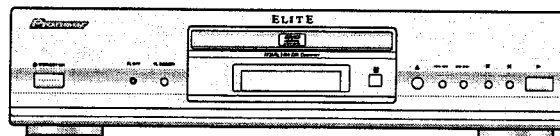




# Service Manual



ORDER NO.  
RRV2564

DVD PLAYER

# DV-47A DV-S733A DV-747A

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model			Power Requirement	Region No.	Remarks
	DV-47A	DV-S733A	DV-747A			
KUXJ/CA	○	—	—	AC120V	1	
LBXJ	—	○	—	AC110V	3	
WLXJ/NC	—	○	—	AC220-240V	3	
WLXJ/RD	—	○	—	AC220-240V	4	
WYXJ	—	—	○	AC220-240V	2	

## CONTENTS

1. SAFETY INFORMATION .....	2	7. GENERAL INFORMATION .....	76
2. EXPLODED VIEWS AND PARTS LIST .....	4	7.1 DIAGNOSIS .....	76
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM ...	14	7.1.1 ID NUMBER AND ID DATA SETTING ·	76
4. PCB CONNECTION DIAGRAM .....	47	7.1.2 SELF-DIAGNOSTIC FUNCTION OF	
5. PCB PARTS LIST .....	60	PICKUP DEFECTIVE .....	78
6. ADJUSTMENT .....	70	7.1.3 TEST POINTS LOCATION .....	79
		7.1.4 TEST MODE SCREEN DISPLAY .....	81
		7.1.5 TROUBLE SHOOTING .....	85
		7.1.6 ERROR CODE .....	86
		7.1.7 DISASSEMBLY .....	90
		7.2 IC .....	95
		8. PANEL FACILITIES AND SPECIFICATIONS ..	126



## 1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.



### WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65



### NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols  (fast operating fuse) and/or  (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

### REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible  (fusible de type rapide) et/ou  (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

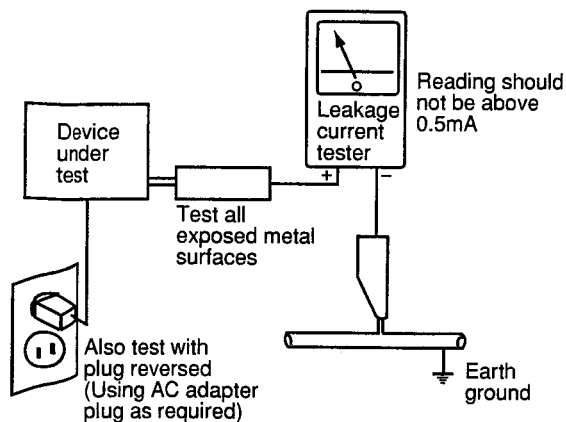
(FOR USA MODEL ONLY)

## 1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

### LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

## 2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a  $\Delta$  on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.



**WARNING !**

THE AEL (ACCESSIBLE EMISSION LEVEL) OF THE LASER POWER OUTPUT IS LESS THAN CLASS 1 BUT THE LASER COMPONENT IS CAPABLE OF EMITTING RADIATION EXCEEDING THE LIMIT FOR CLASS 1.  
A SPECIALLY INSTRUCTED PERSON SHOULD DO SERVICING OPERATION OF THE APPARATUS.

**LASER DIODE CHARACTERISTICS**

FOR DVD : MAXIMUM OUTPUT POWER : 5 mW  
WAVELENGTH : 655 nm  
FOR CD : MAXIMUM OUTPUT POWER : 5 mW  
WAVELENGTH : 785 nm

## LABEL CHECK

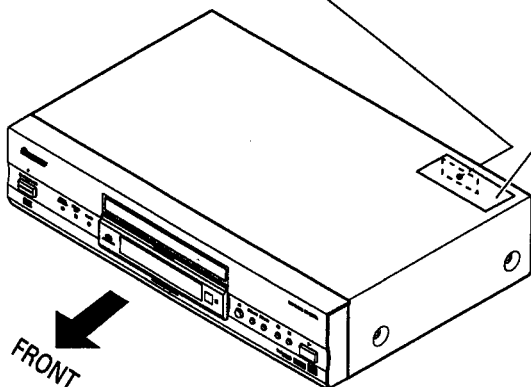
WLXJ/NC, WLXJ/RD and WYXJ types

**CLASS 1  
LASER PRODUCT**

(Printed on the Rear Panel)

**CAUTION** : VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.  
**VORSICHT** : SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG, WENNABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN!  
**ADVARSEL** : SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING UNDGA UDSÆTTELSE FOR STRÅLING.  
**VARNING** : SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD BETRÄKTA EJ STRÅLEN.  
**VARO!** : AVATTAESSA ALTIISTUT NÄKYVÄ JA NÄKYMÄTTÖMÄLLE LASERSATEEN YLLÄ ÄLÄ KATSO SÄTEESÄ.  
**CUIDADO** : RADIACIÓN LASER VISIBLE E INVISIBLE AL ESTAR ABIERTO. EVITAR EXPOSICIÓN AL RAYO.

VRW187Z



**Additional Laser Caution**

1. Loading-status detection switch (S101 on the LOAB assy) are detected by the microprocessor (IC601 in the DVD assy).  
• To permit the laser diode to oscillate, it is required to set the loading-status detection switch for the clamp position (the center terminal of S101 is shorted to +3V).  
When the voltage of IC101-pin 20 is +3V and IC601 (microprocessor) - pin 83 is +3V, 650nm laser diode for DVD oscillates in the DVD assy. When the voltage of IC101-pin 20 is +3V and IC601 (microprocessor) - pin 83 is 0V (GND), 780nm laser diode for CD oscillates in the DVD assy.  
In the test mode \*, the laser diode oscillates when microprocessor detects a PLAY signal, or when the PLAY key is pressed (S252 ON in the KEYB assy), with the above requirements satisfied.
2. When the cover is open, close viewing through the objective lens with the naked eye will cause exposure to the laser beam.

\* : See page 72.

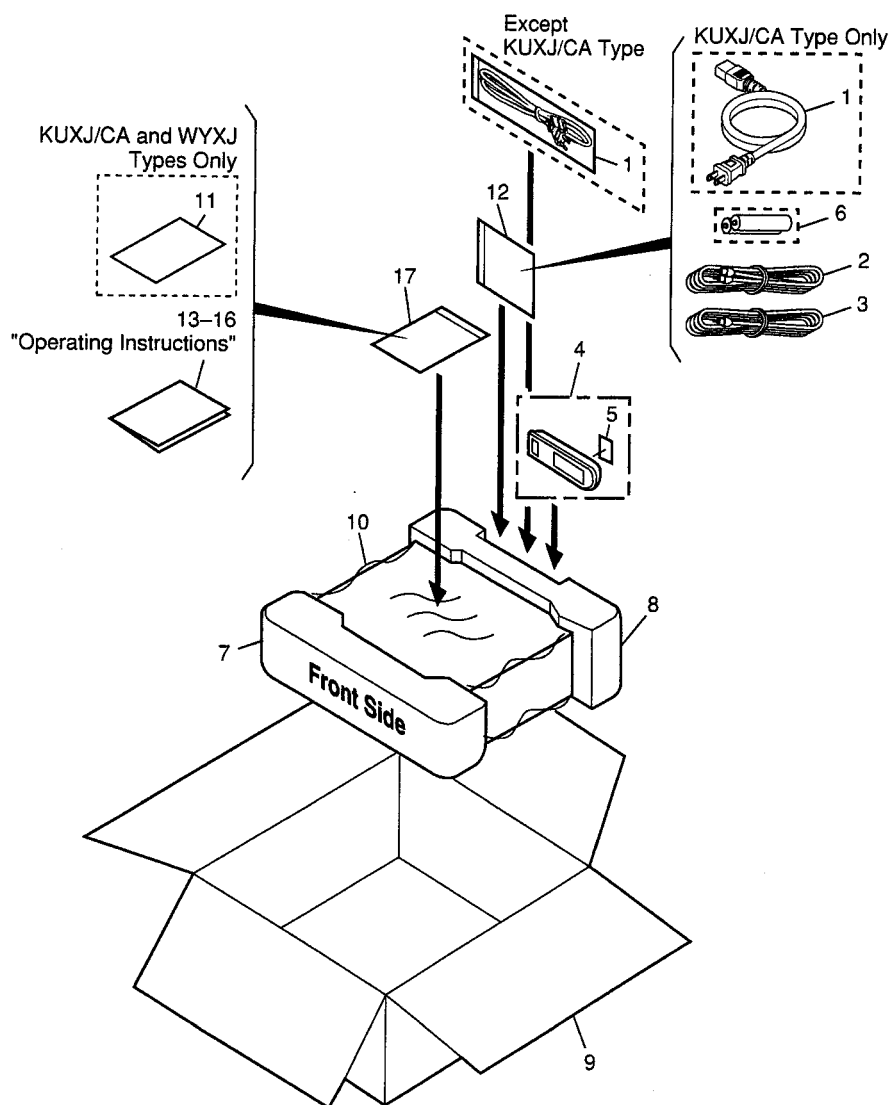


## 2. EXPLODED VIEWS AND PARTS LIST

NOTES: ● Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.

- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Screws adjacent to  $\nabla$  mark on the product are used for disassembly.

## 2.1 PACKING





**(1) PACKING PARTS LIST**

Mark	No.	Description	Part No.
△	1	Power Cord	See Contrast table (2)
	2	Audio Cable (L = 1.5m)	VDE1052
	3	Video Cable (L = 1.5m)	VDE1053
	4	Remote Control Unit	See Contrast table (2)
	5	Battery Cover	See Contrast table (2)
NSP	6	Dry Cell Battery (R6P, AA)	VEM-013
	7	Pad F	VHA1288
	8	Pad R	VHA1289
	9	Packing Case	See Contrast table (2)
	10	Mirror Mat Sheet	Z23-007
NSP	11	Warranty Card	See Contrast table (2)
	12	Polyethylene Bag	VHL1051
	13	Operating Instructions (English)	See Contrast table (2)
	14	Operating Instructions (Trad-Chinese)	See Contrast table (2)
	15	Operating Instructions (English/French/German/Italian)	See Contrast table (2)
	16	Operating Instructions (Spanish/Portuguese/Dutch/Swedish)	See Contrast table (2)
	17	Polyethylene Bag	See Contrast table (2)

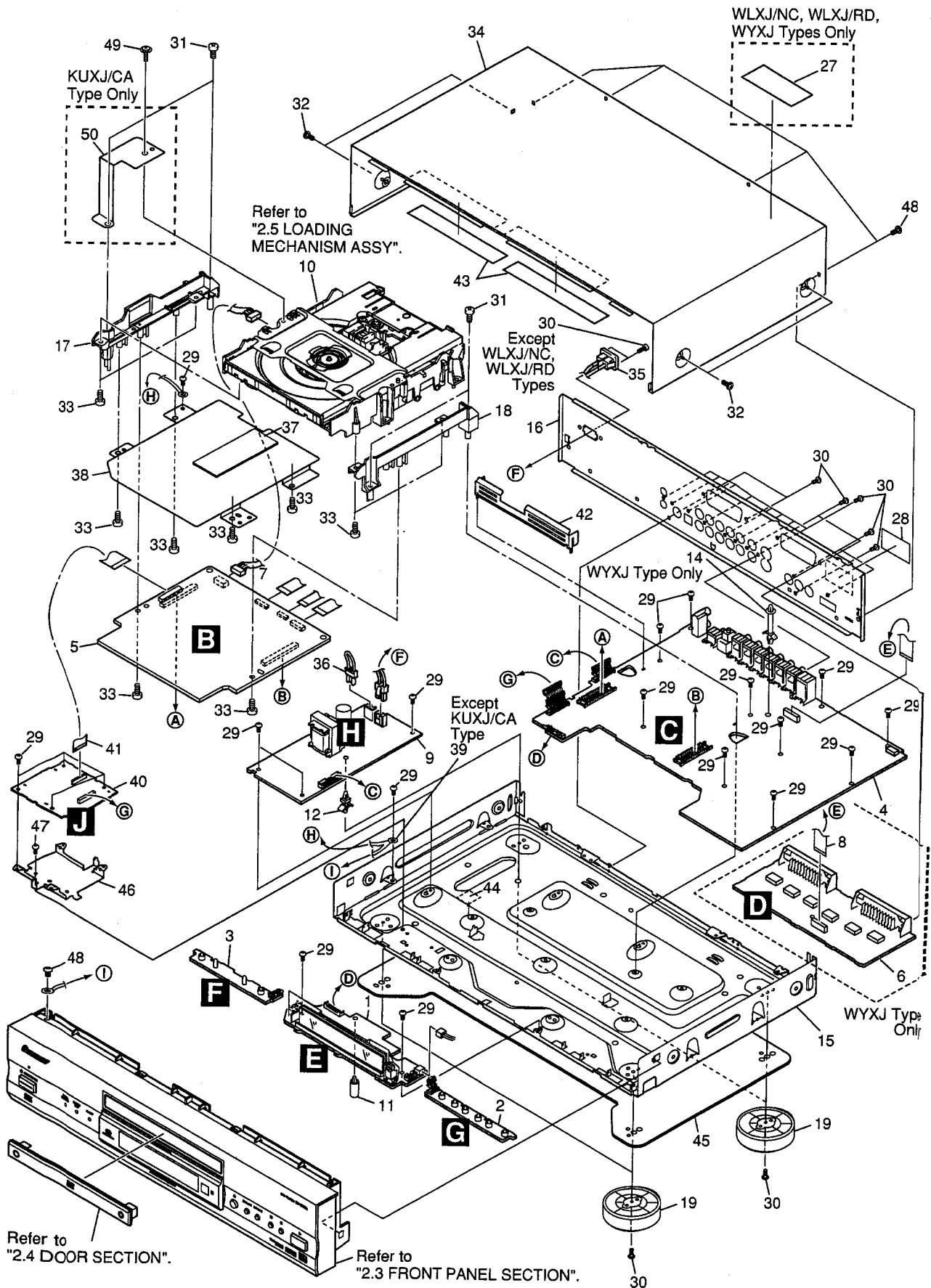
**(2) CONTRAST TABLE**

DV-47A/KUXJ/CA, DV-S733A/LBXJ, WLXJ/NC, WLXJ/RD and DV-747A/WYXJ are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.					Remarks
			DV-47A /KUXJ/CA	DV-S733A /LBXJ	DV-S733A /WLXJ/NC	DV-S733A /WLXJ/RD	DV-747A /WYXJ	
△	1	Power Cord	ADG7061	ADG7060	ADG1154	ADG1154	ADG7062	
	4	Remote Control Unit	VXX2714	VXX2713	VXX2713	VXX2713	VXX2785	
	5	Battery Cover	VNK4423	VNK4422	VNK4422	VNK4422	VNK4936	
	9	Packing Case	VHG2142	VHG2138	VHG2139	VHG2140	VHG2141	
	11	Warranty Card	ARY7007	Not used	Not used	Not used	ARY7022	
NSP	13	Operating Instructions (English)	VRB1278	VRB1278	VRB1278	VRB1278	Not used	
	14	Operating Instructions (Trad-Chinese)	Not used	VRC1145	VRC1145	Not used	Not used	
	15	Operating Instructions (English/French/German/Italian)	Not used	Not used	Not used	Not used	VRE1096	
	16	Operating Instructions (Spanish/Portuguese/Dutch/Swedish)	Not used	Not used	Not used	Not used	VRF1059	
	17	Polyethylene Bag	Z21-038	Not used	Not used	Not used	AHG7032	
NSP	17	Polyethylene Bag	Not used	VHL1051	VHL1051	VHL1051	Not used	



## 2.2 EXTERIOR SECTION





# (1) EXTERIOR PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	FLIR Assy	See Contrast table (2)		26	*****	
NSP	2	KEYB Assy	VWG2306		27	Label	See Contrast table (2)
NSP	3	PWSB Assy	See Contrast table (2)	NSP	28	ID Label	VRW1877
	4	AVJB Assy	See Contrast table (2)		29	Screw	BBZ30P060FMC
	5	DVDM Assy	VWS1471		30	Screw	BBZ30P080FZK
	6	SCRB Assy	See Contrast table (2)		31	Screw	BBZ30P180FMC
	7	Connector Assy	PG05KK-E15		32	Screw	See Contrast table (2)
	8	FFC	See Contrast table (2)		33	Screw	PPZ30P080FMC
Δ	9	POWER SUPPLY Unit	VWR1346		34	Bonnet Case S	See Contrast table (2)
NSP	10	Loading Mechanism Assy	VWT1188	Δ	35	AC Inlet Assy	See Contrast table (2)
	11	PCB Support	VEC1266		36	Housing Assy	VKP2269
	12	PCB Support	VEC2184	Δ	37	MH Spacer	VEC2250
	13	*****			38	Mechanism Holder	VNE2266
	14	PCB Holder	See Contrast table (2)		39	Earth Lead Unit	See Contrast table (2)
NSP	15	Chassis	VNA2160	NSP	40	SACD Assy	VWG2331
	16	Rear Panel	See Contrast table (2)		41	Flexible Cable	VDA1879
	17	Adapter27 L	VNL1926		42	Shielding Plate	VNF1124
	18	Adapter27 R	VNL1927		43	Cushion	VEB1336
	19	Insulator	VXA2424		44	Bottom Cushion	VEB1337
	20	*****		NSP	45	Bottom Plate	VNA2345
	21	*****			46	SACD Stay	VNE2258
	22	*****			47	Screw	BBZ30P040FZK
	23	*****			48	Screw	BBZ30P080FCC
	24	*****			49	Screw	Z39-019
	25	*****			50	Shielding Plate	See Contrast table (2)

# (2) CONTRAST TABLE

DV-47A/KUXJ/CA, DV-S733A/LBXJ, WLXJ/NC, WLXJ/RD and DV-747A/WYXJ are constructed the same except for the following :

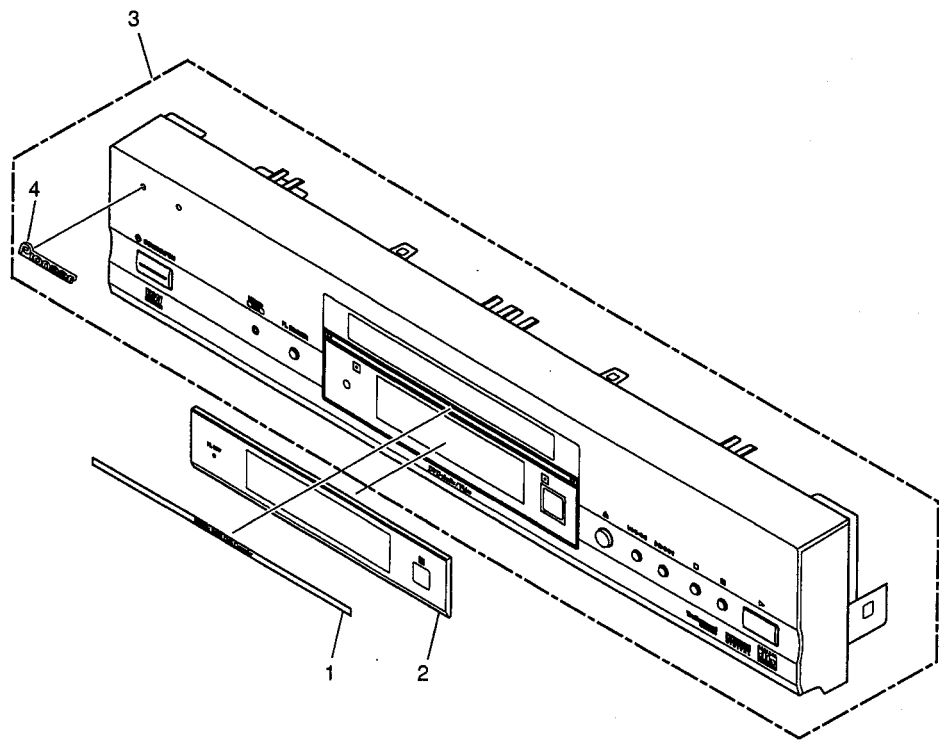
Mark	No.	Symbol and Description	Part No.					Remarks
			DV-47A /KUXJ/CA	DV-S733A /LBXJ	DV-S733A /WLXJ/NC	DV-S733A /WLXJ/RD	DV-747A /WYXJ	
NSP	1	FLIR Assy	VWG2327	VWG2325	VWG2324	VWG2324	VWG2326	
	3	PWSB Assy	VWG2312	VWG2310	VWG2310	VWG2310	VWG2311	
	4	AVJB Assy	VWV1874	VWV1877	VWV1875	VWV1875	VWV1876	
	6	SCRB Assy	Not used	Not used	Not used	Not used	VWV1850	
	8	FFC	Not used	Not used	Not used	Not used	VDA1870	
	14	PCB Holder	Not used	Not used	Not used	Not used	VEC2215	
	16	Rear Panel	VNA2366	VNA2368	VNA2369	VNA2370	VNA2367	
	27	Label	Not used	Not used	VRW1872	VRW1872	VRW1872	
	32	Screw	BCZ40P060FZK	BCZ40P060FNI	BCZ40P060FNI	BCZ40P060FNI	BCZ40P060FNI	
	34	Bonnet Case S	VXX2750	VXX2766	VXX2766	VXX2766	VXX2790	
Δ NSP	35	AC Inlet Assy	ADX7406	ADX7405	VKP2268	VKP2268	ADX7405	
	39	Earth Lead Unit	Not used	VDA1903	VDA1903	VDA1903	VDA1903	
	50	Shielding Plate	VNF1125	Not used	Not used	Not used	Not used	



DV-47A, DV-S733A, DV-747A

2.3 FRONT PANEL SECTION

■ DV-47A

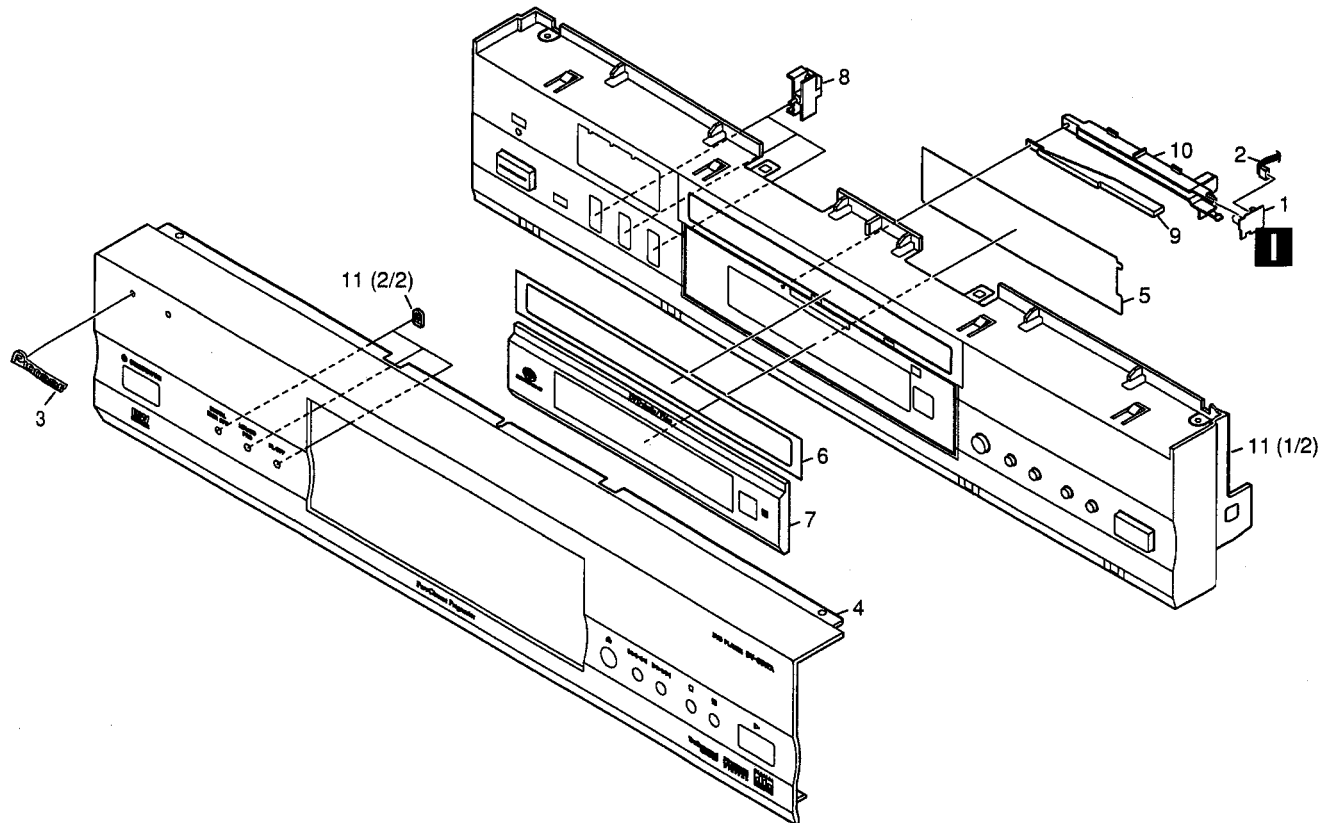


● FRONT PANEL PARTS LIST

Mark	No.	Description	Part No.
	1	Sub Plate	VEC2204
	2	FL Lens	VEC2230
	3	Front Panel Assy	VXA2474
	4	Pioneer Name Plate	VAM1109



■ DV-S733A, DV-747A



(1) FRONT PANEL PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
NSP	1	DILB Assy	VWG2322	6	Door Cushion		See Contrast table (2)
	2	Connector Assy	PF02PP-B20	7	FL Lens		See Contrast table (2)
	3	Name Plate	See Contrast table (2)	8	LED Lens		VNK491B
	4	AL Panel	See Contrast table (2)	9	Center Lens		VNK491D
	5	FL Filter	VEC2224	10	Lens Holder		VNK4911
				11	Panel Base Assy		See Contrast table (2)

(2) CONTRAST TABLE

DV-S733A/LBXJ, WLXJ/NC, WLXJ/RD and DV-747A/WYXJ are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.				Remarks
			DV-S733A /LBXJ	DV-S733A /WLXJ/NC	DV-S733A /WLXJ/RD	DV-747A /WYXJ	
	3	Name Plate		PAN1377		VAM1124	
	4	AL Panel		VAH1390		VAH1389	
	6	Door Cushion		VEC2228		VEC2254	
	7	FL Lens		VEC2229		VEC2256	
	11	Panel Base Assy		VXA2472		VXA2473	





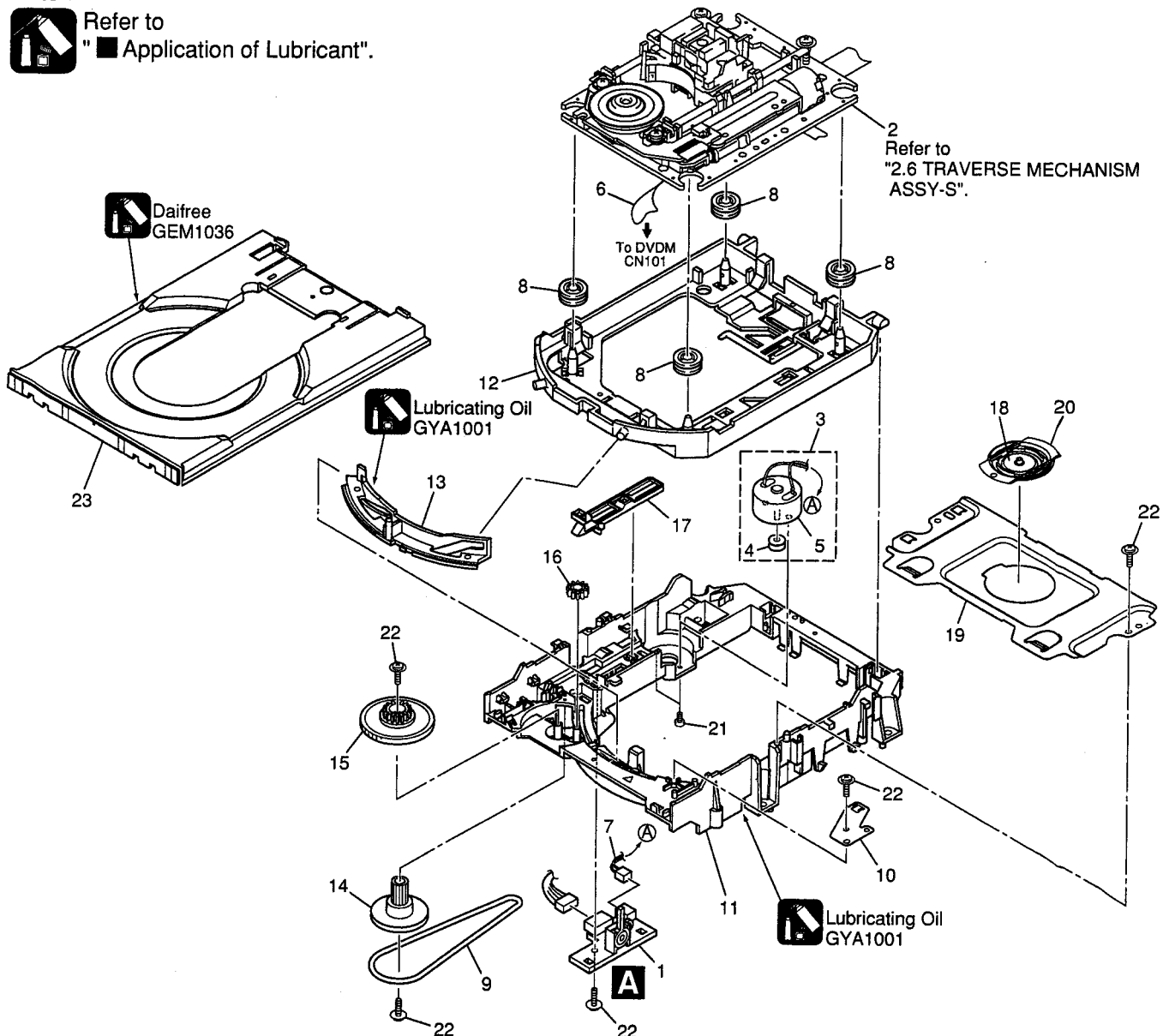


## 2.5 LOADING MECHANISM ASSY

### Note :



Refer to  
"■ Application of Lubricant".

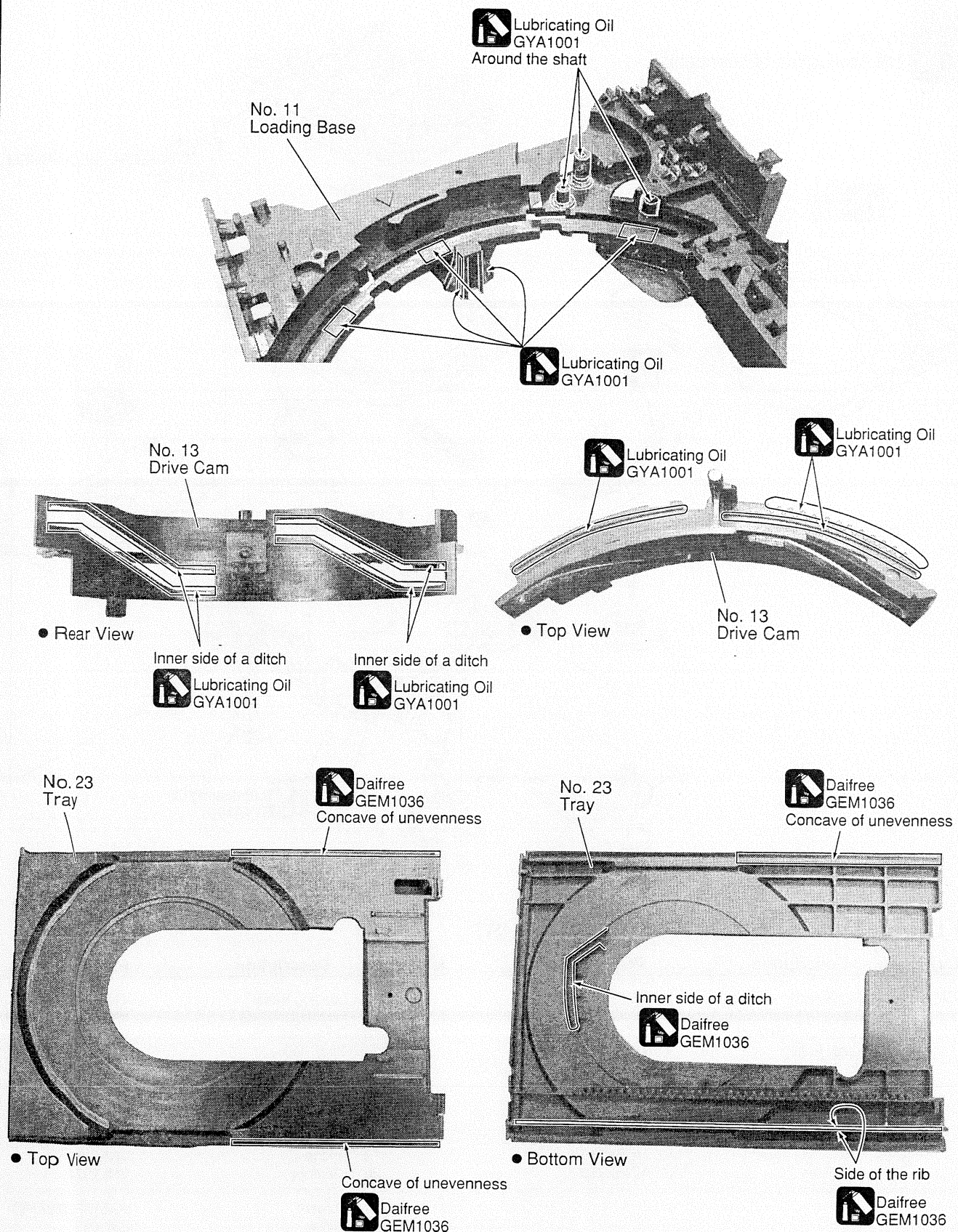


### ● LOADING MECHANISM ASSY PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
NSP	1	LOAB Assy	VWG2279	11	Loading Base		VNL1917
	2	Traverse Mechanism Assy-S	VXX2782	12	Float Base DVD		VNL1918
	3	Loading Motor Assy	VXX2505	13	Drive Cam		VNL1919
	4	Motor Pulley	PNW1634	14	Gear Pulley		VNL1921
	5	Carriage DC Motor / 0.3W	PXM1027	15	Loading Gear		VNL1922
	6	Flexible Cable (26P)	VDA1864	16	Drive Gear		VNL1923
	7	Connector Assy 2P	VKP2253	17	SW Lever		VNL1925
	8	Float Rubber	VEB1327	18	Clamper Plate		VNE2251
	9	Belt	VEB1330	19	Bridge		VNE2252
	10	Stabilizer	VNE2253	20	Clamper		VNL1924
			21	Screw		JGZ17P028FMC	
			22	Screw		Z39-019	
			23	Tray		VNL1920	

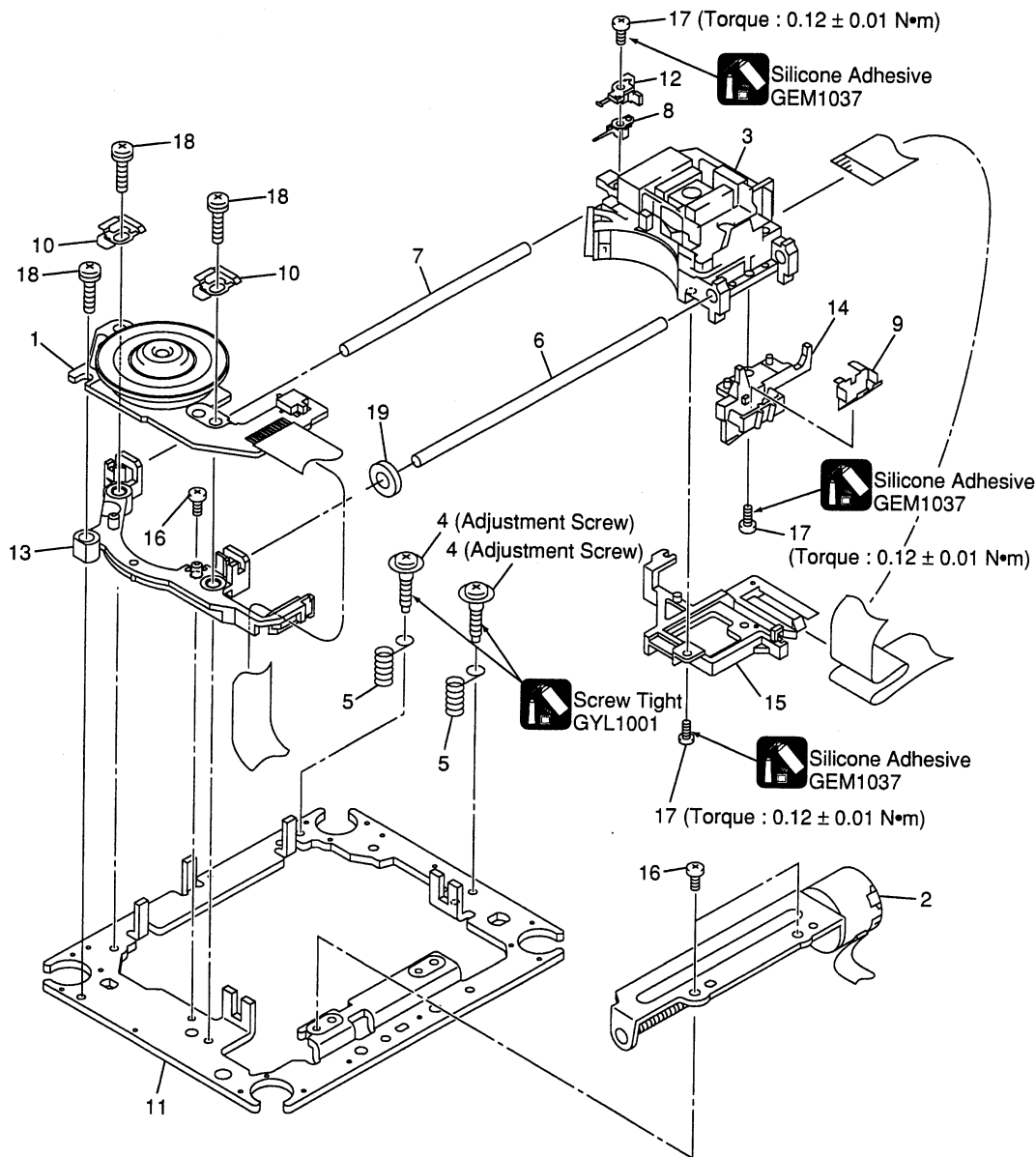


■ Application of Lubricant





2.6 TRAVERSE MECHANISM ASSY-S



● TRAVERSE MECHANISM ASSY-S PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	Spindle Motor	VXM1088 (or VXM1089)	NSP	11	Mechanism Chassis	VNE2248
	2	Stepping Motor (CARRIAGE)	VXM1090 (or VXM1091)		12	Slider	VNL1811
	3	Pickup Assy-S	OXX8003		13	Spacer	VNL1913
	4	Skew Screw	VBA1080		14	Joint	VNL1914
	5	Skew Spring	VBH1335		15	FFC Holder	VNL1915
	6	Guide Bar	VLL1514		16	Screw	BBZ20P050FZK
	7	Sub Guide Bar	VLL1515		17	Screw	OBA8009
	8	Hold Spring	VNC1017		18	Screw	PMA26P1 00FMC
	9	Joint Spring	VNC1019		19	Damper Sheet	VEB1335
	10	Support Spring	VNC1020				



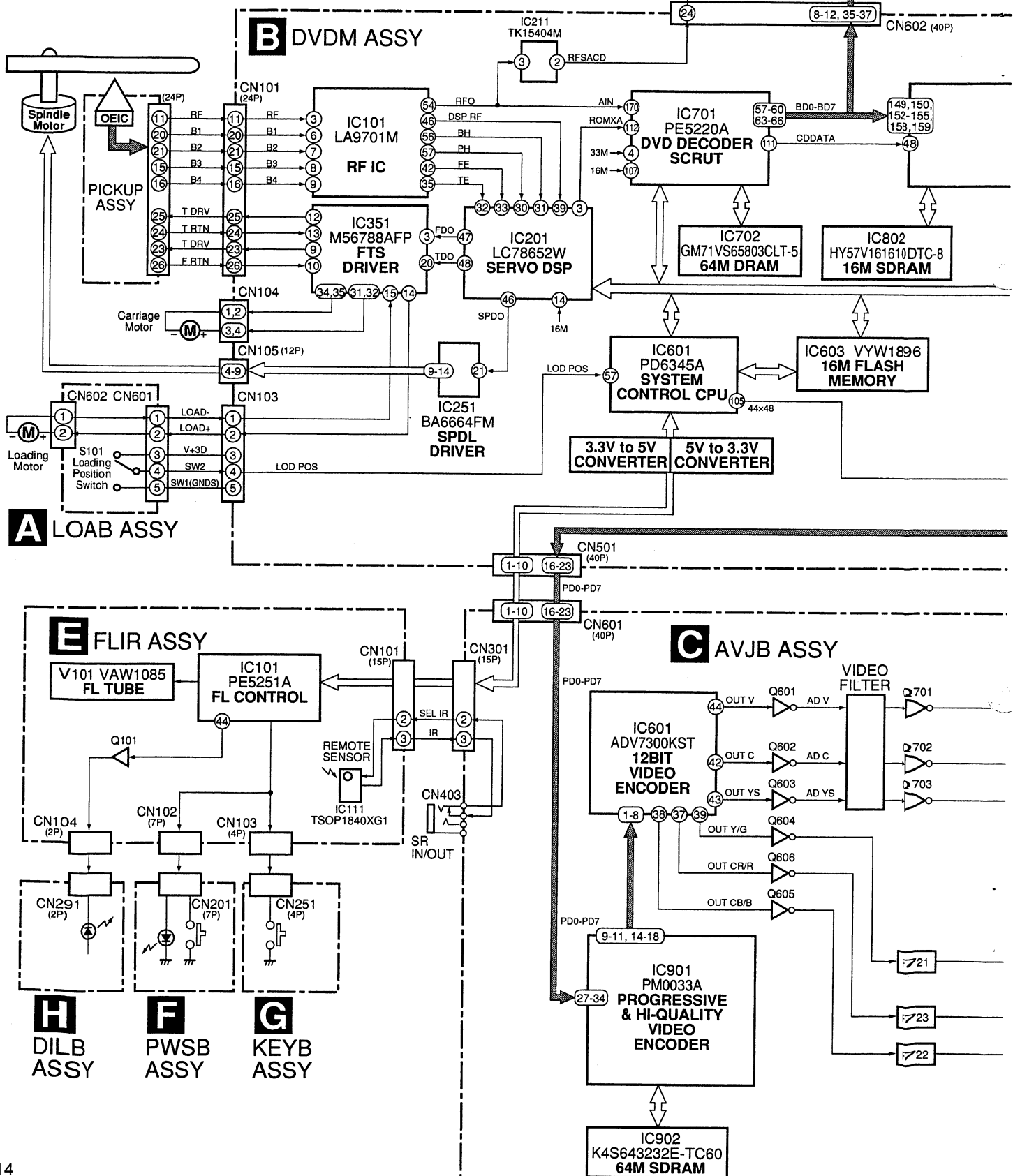
DV-47A, DV-S733A, DV-747A

## 3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

### 3.1 BLOCK DIAGRAM

#### 3.1.1 SIGNAL ROUTE

■ KUXJ/CA, LBXJ, WLXJ/NC and WLXJ/RD Types





IC801  
CXD2753R  
SACD RECORDER



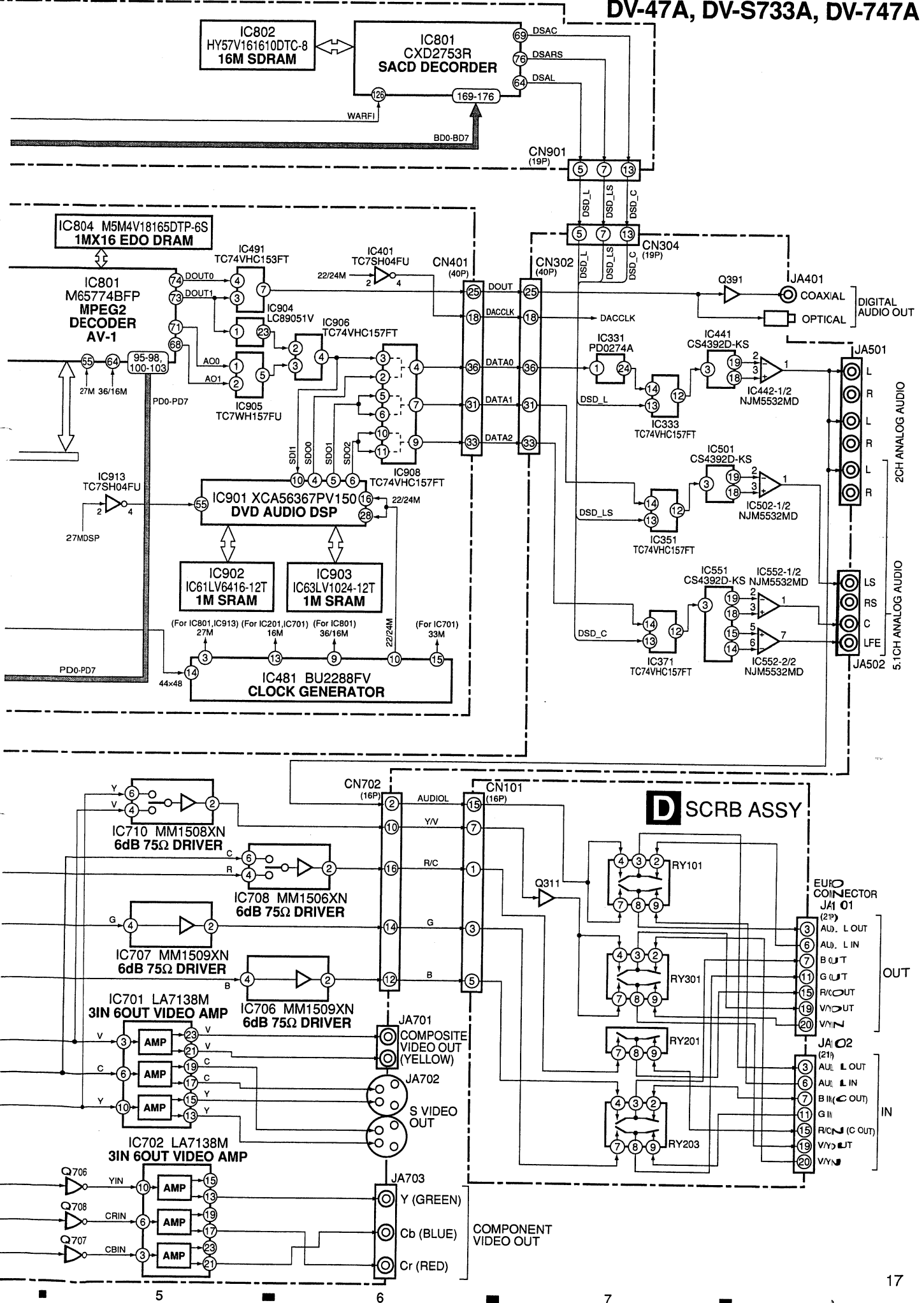


### ■ WYXJ Type

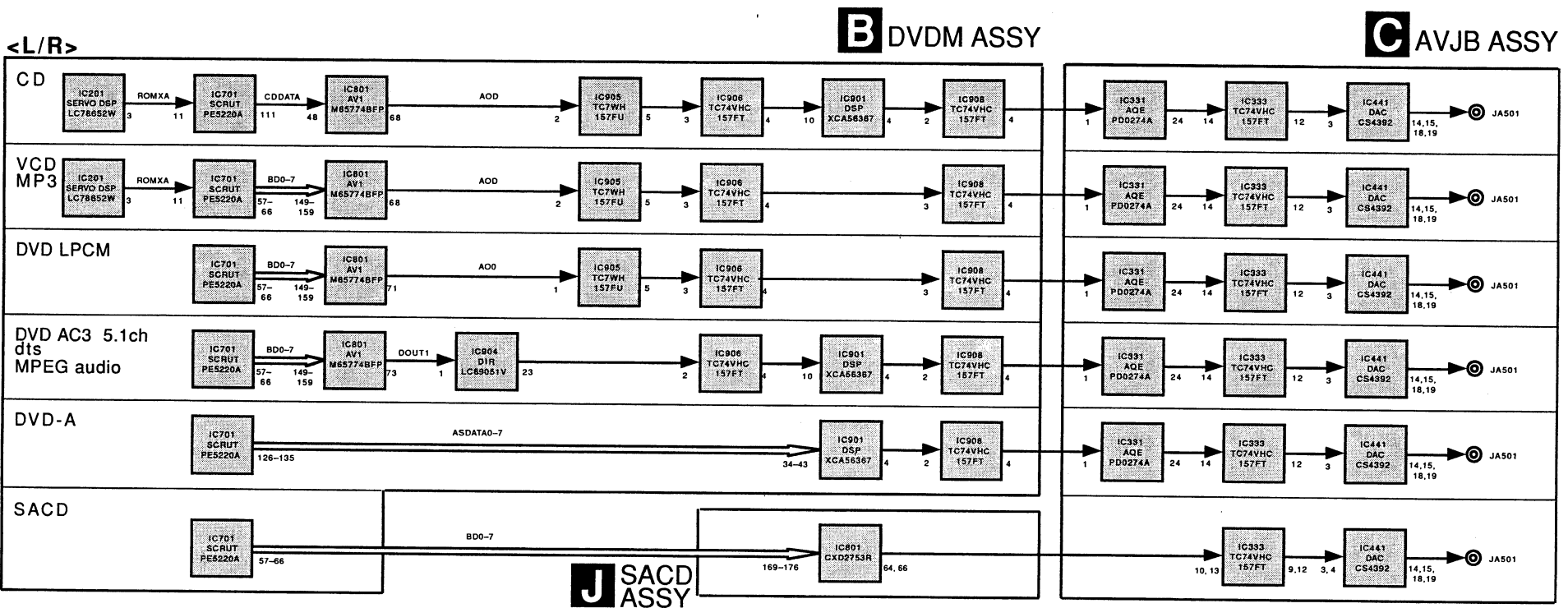




# DV-47A, DV-S733A, DV-747A



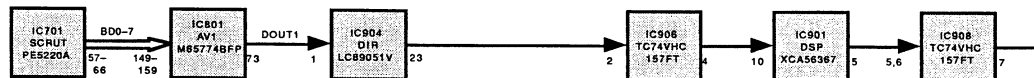






<LS/RS>

DVD AC3 5.1ch  
dts



DVD-A

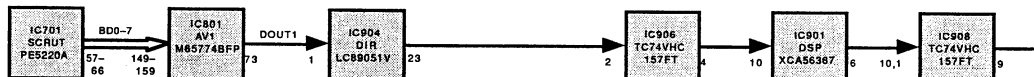


SACD

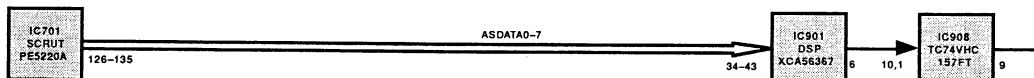


<C/LFE>

DVD AC3 5.1ch  
dts



DVD-A



SACD



**B** DVDM ASSY

**C** AVJB ASSY

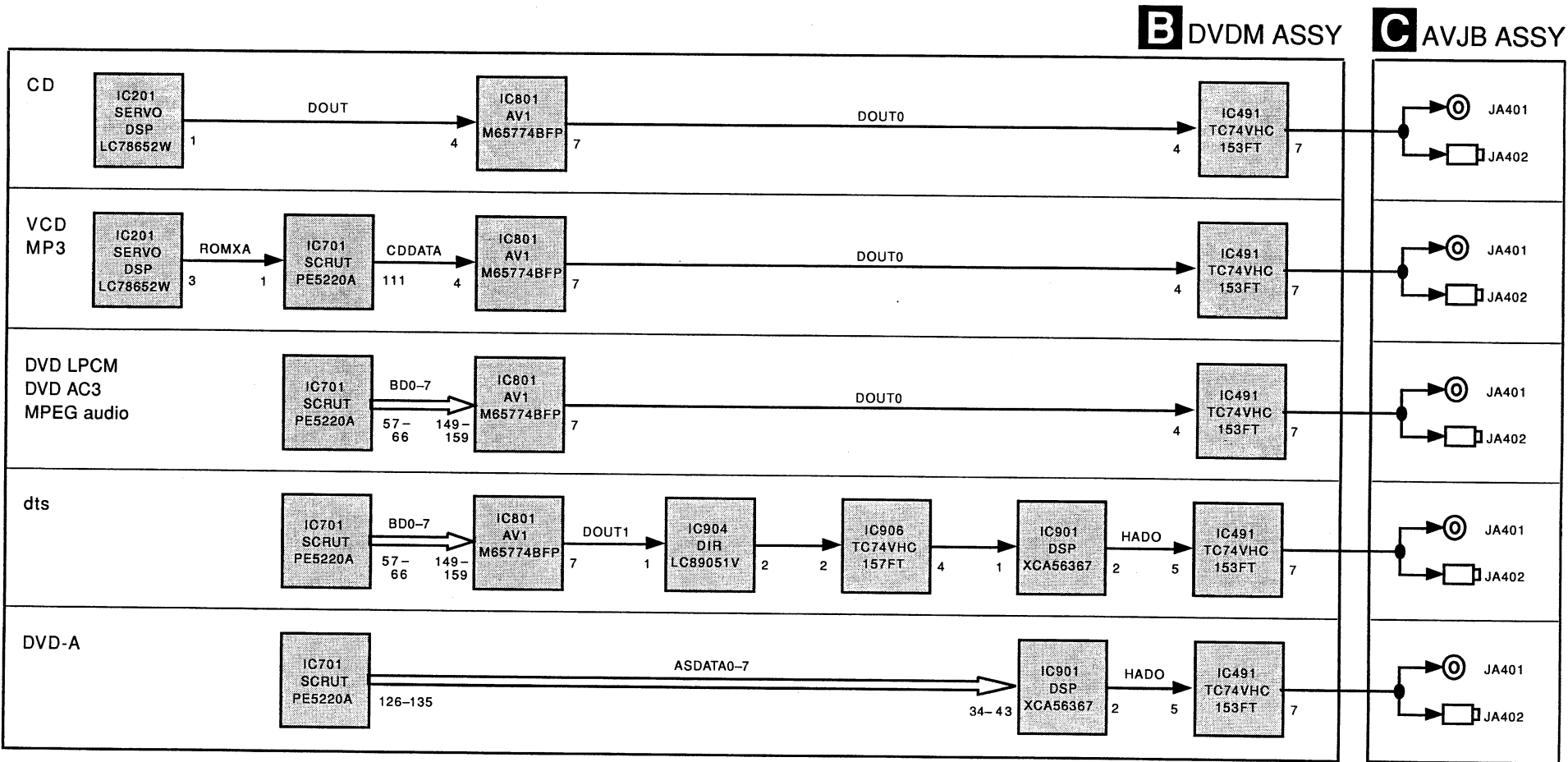
**J** SACD ASSY

**J** SACD ASSY

DV-47A, DV-S733A, DV-747A

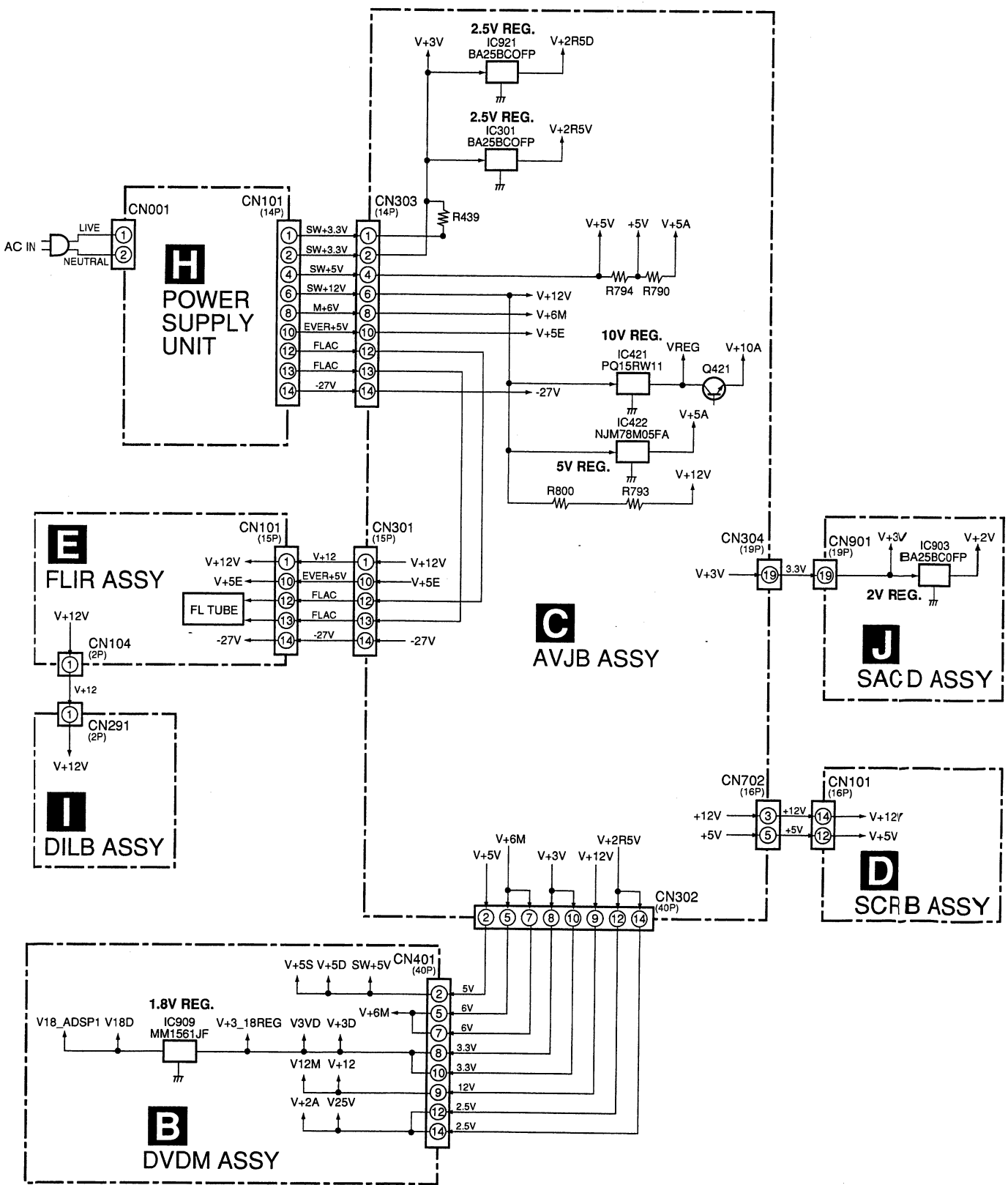


3.1.3 AUDIO DATA STREAM (COAXIAL/OPTICAL OUTPUT)





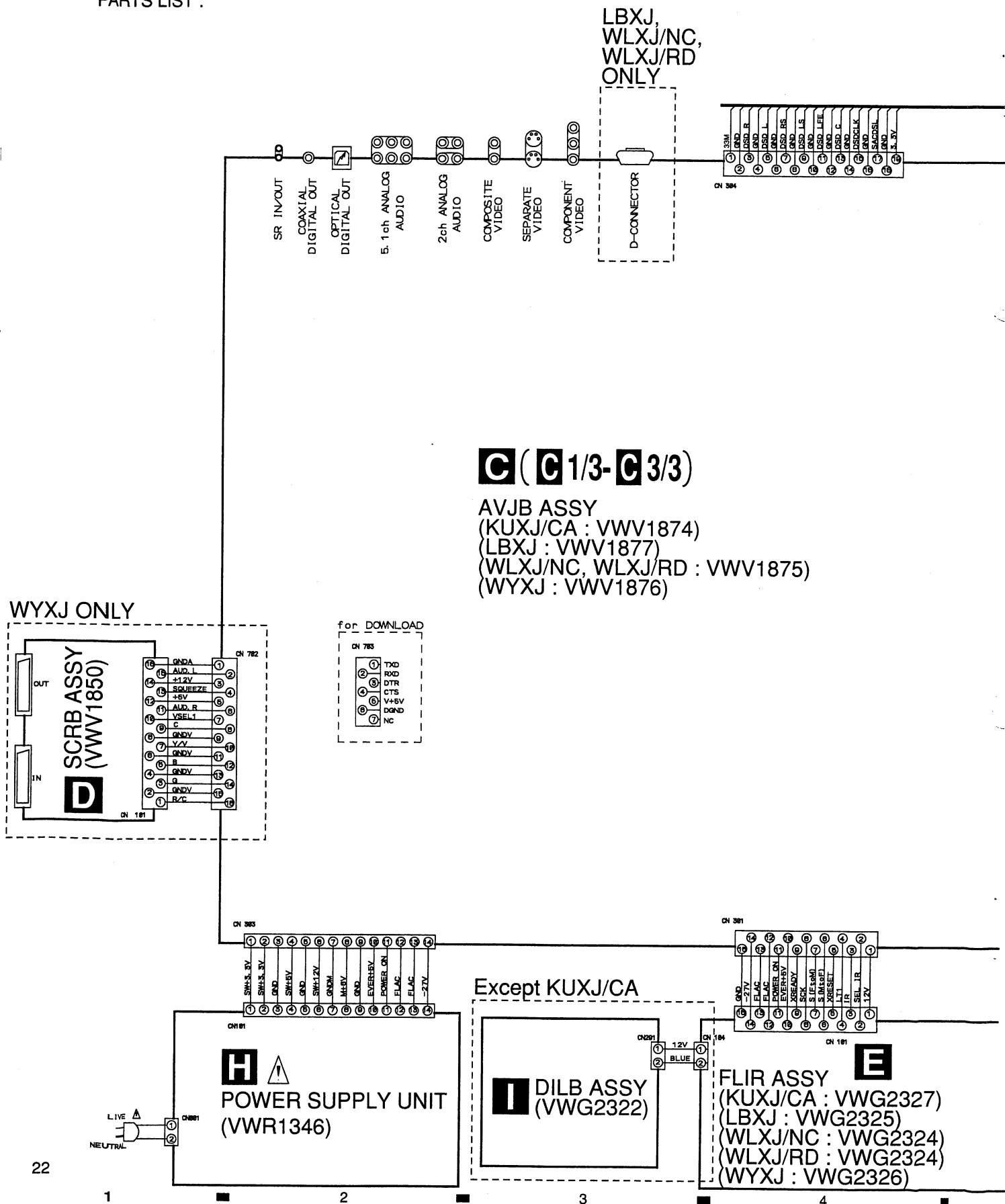
3.1.4 POWER SUPPLY BLOCK





## 3.2 LOAB ASSY and OVERALL WIRING DIAGRAM

Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".





**J** SACD ASSY  
(VWG2331)

- (RF) : RF SIGNAL ROUTE  
(F) : FOCUS SERVO LOOP LINE  
(T) : TRACKING SERVO LOOP LINE  
(S) : SLIDER SERVO LOOP LINE

**B (B1/4-B4/4)**  
DVDM ASSY (VWS1471)

**F** PWSB ASSY  
(KUXJ/CA : VWG2312)  
(LBXJ : VWG2310)  
(WLXJ/NC : VWG2310)  
(WLXJ/RD : VWG2310)  
(WYXJ : VWG2311)

**G** KEYB ASSY  
(VWG2306)

**PICKUP ASSY-S (OXX8003)**

**SPINDLE MOTOR : VXX1088**

**A** **LOAD ASSY (VWG2279)**

**LOADING MOTOR ASSY : VXX2505**

**STEPPING MOTOR (CARRIAGE) : VXM1090**

**TRAVERSE MECHANISM ASSY-S (VXX2782)**

**LOADING MECHANISM ASSY (VWT1188)**








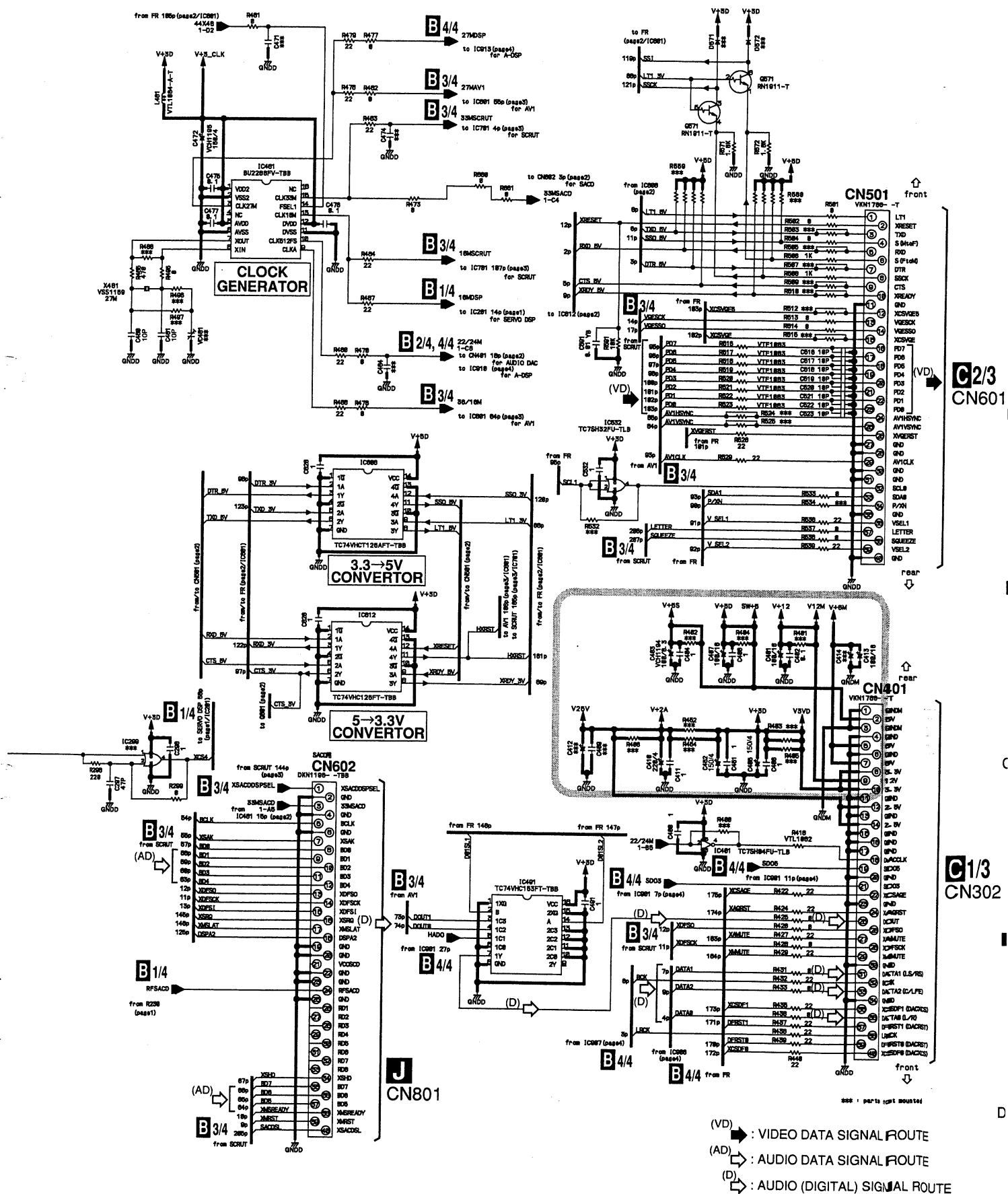








 : The power supply is shown with the marked box.



(VD) ➡ : VIDEO DATA SIGNAL ROUTE  
(AD) ➡ : AUDIO DATA SIGNAL ROUTE  
(D) ➡ : AUDIO (DIGITAL) SIGNAL ROUTE



## A

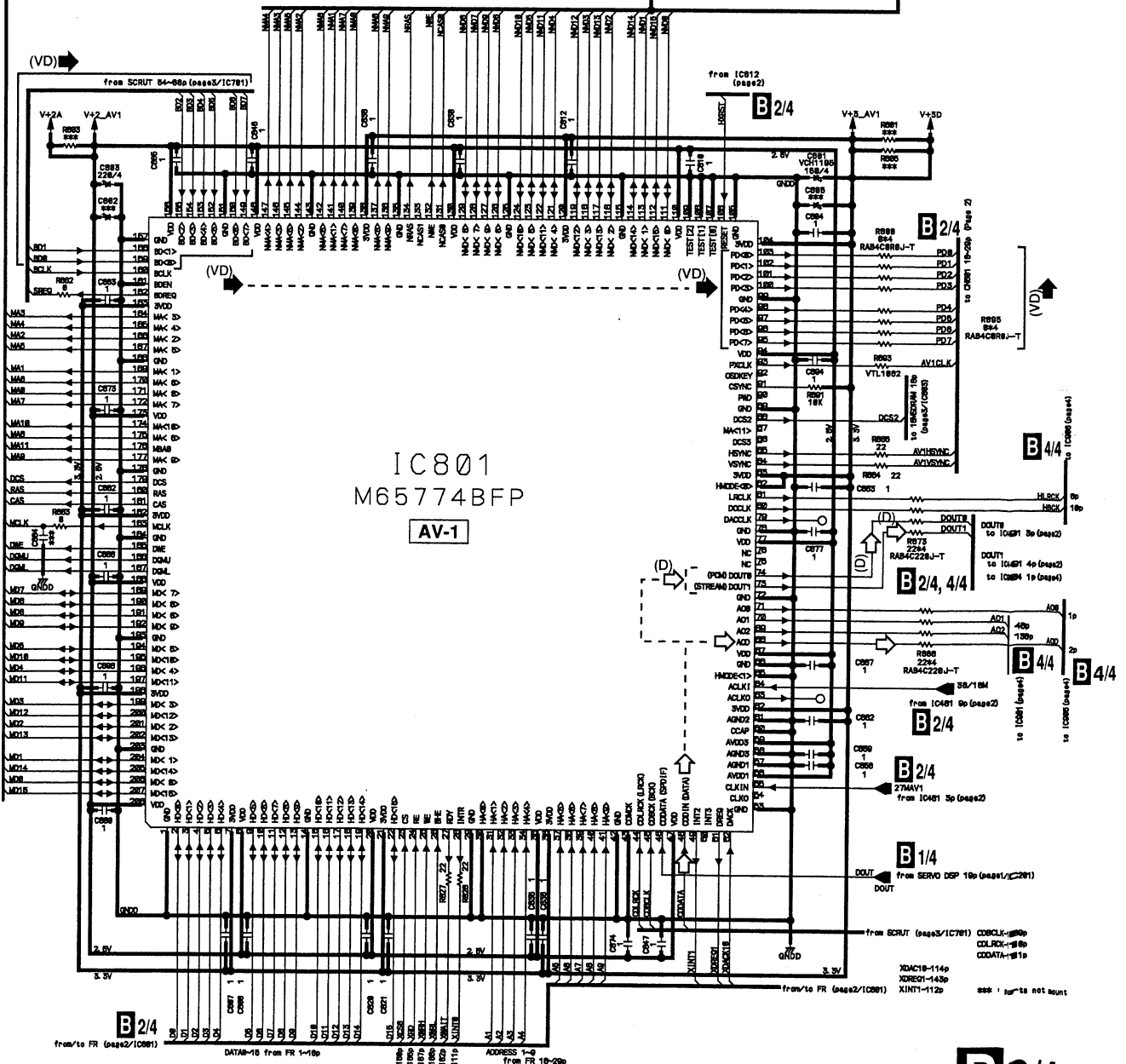
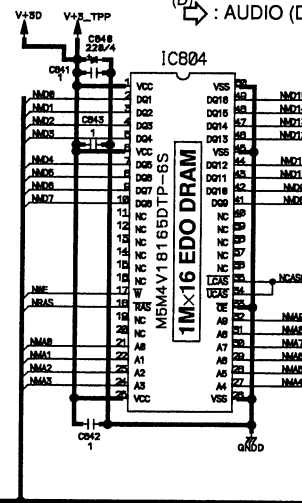
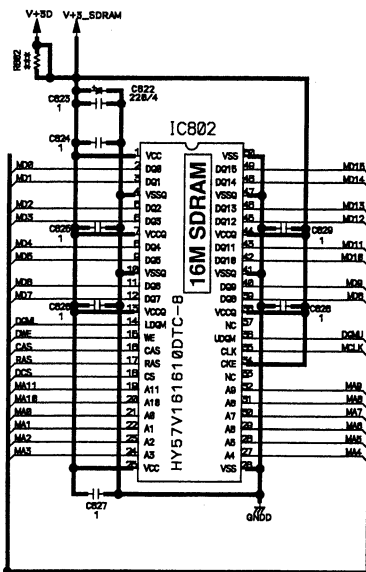
## 3





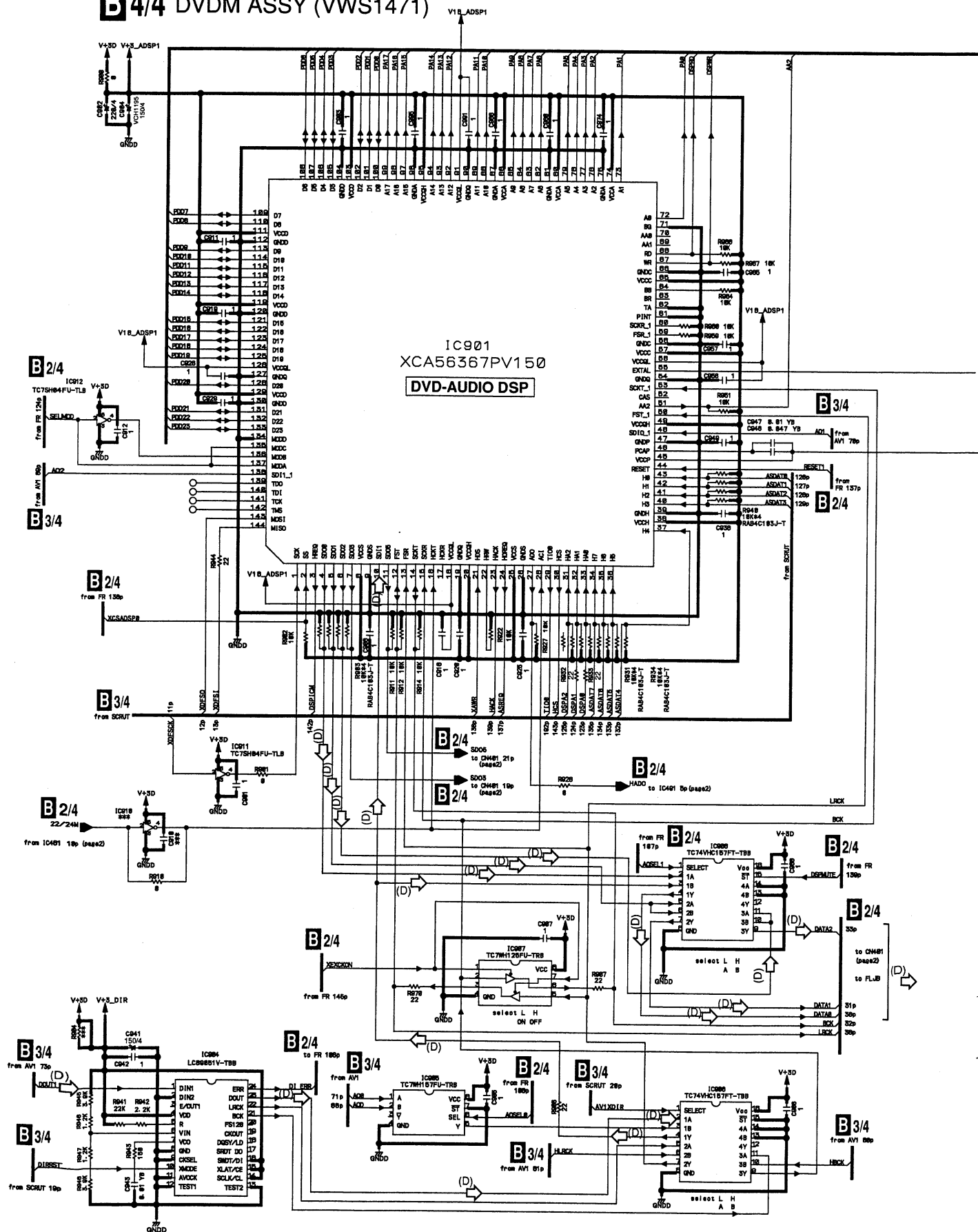
## DV-47A, DV-S733A, DV-747A

- (V) : RF (VIDEO) SIGNAL ROUTE  
 (VD) : VIDEO DATA SIGNAL ROUTE  
 (AD) : AUDIO DATA SIGNAL ROUTE  
 □ : AUDIO SIGNAL ROUTE  
 (D) : AUDIO (DIGITAL) SIGNAL ROUTE






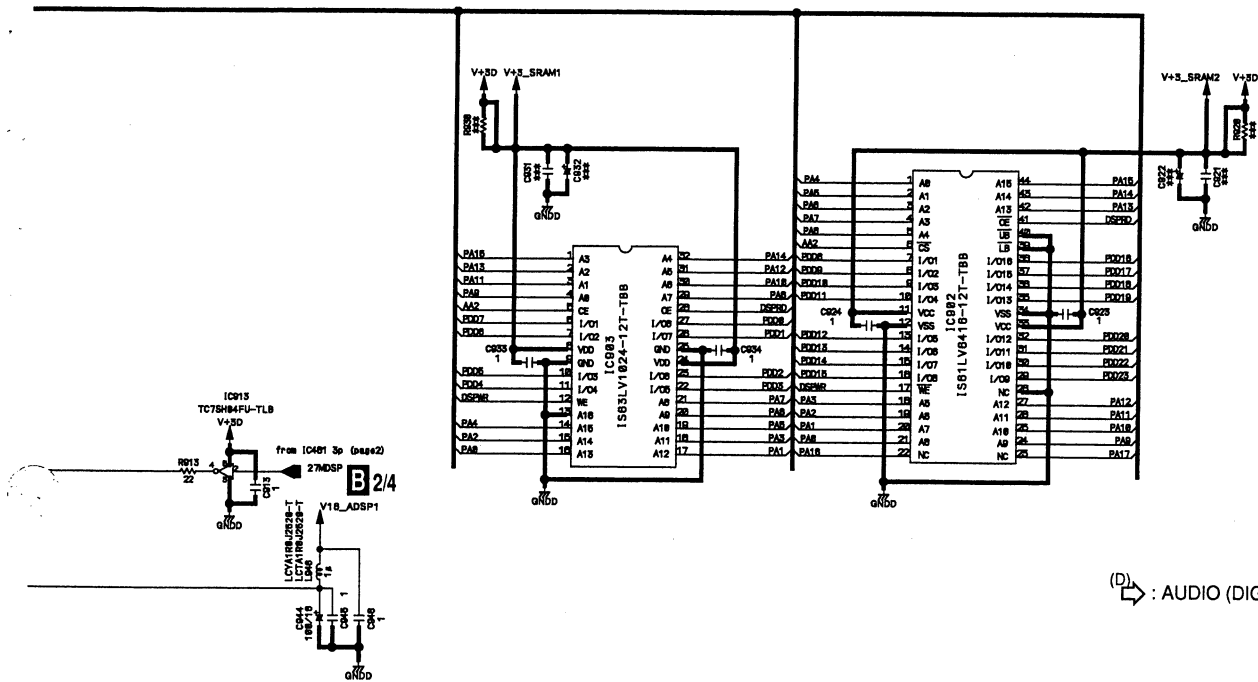
## B 4/4 DVDM ASSY (VWS1471)



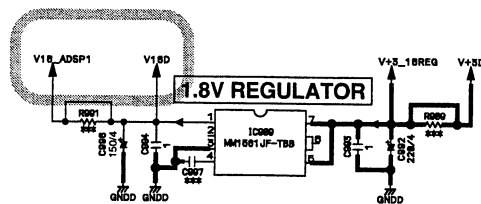


**DV-47A, DV-S733A, DV-747A**

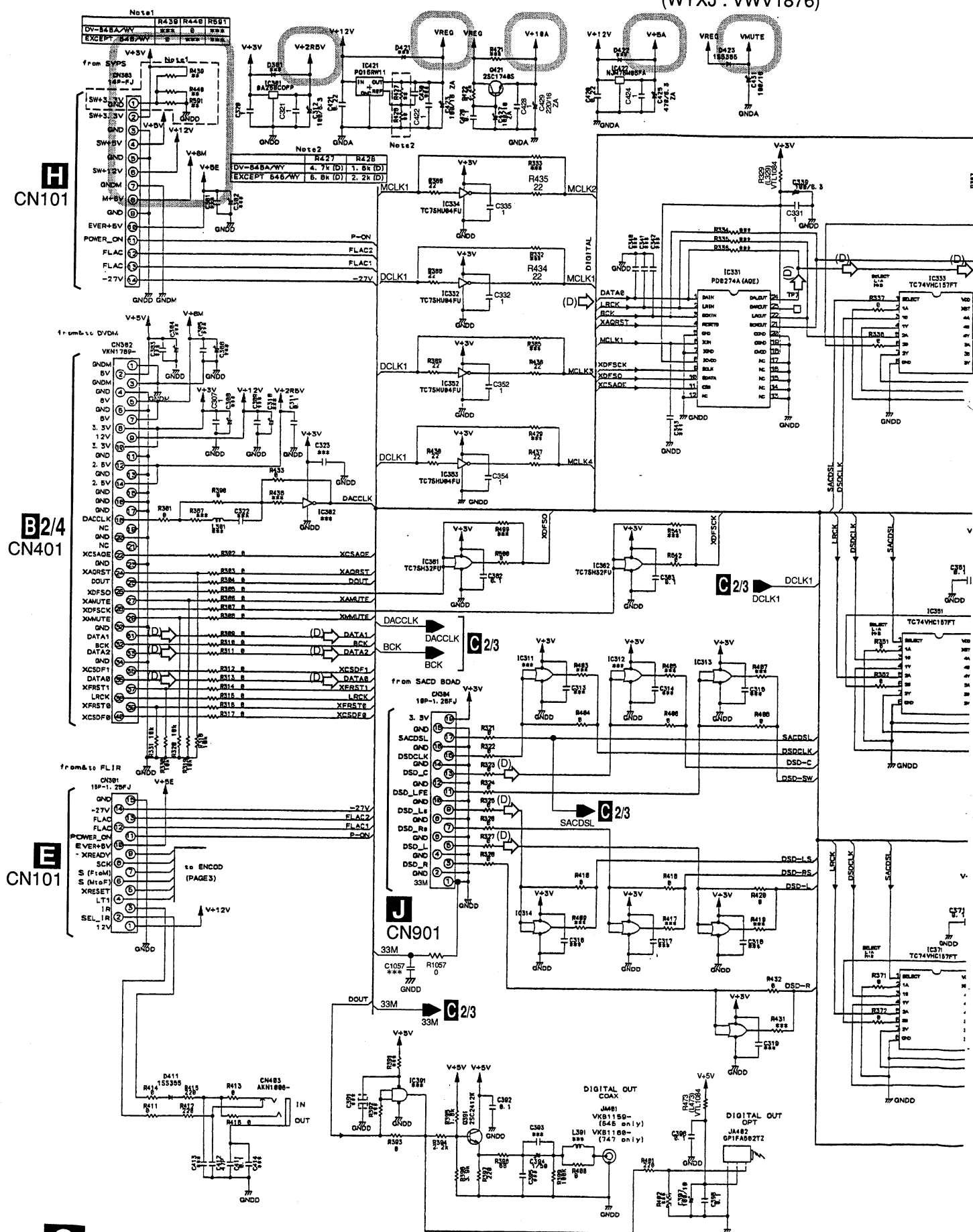
 : The power supply is shown with the marked box.



(D) ➡ : AUDIO (DIGITAL) SIGNAL ROUTE







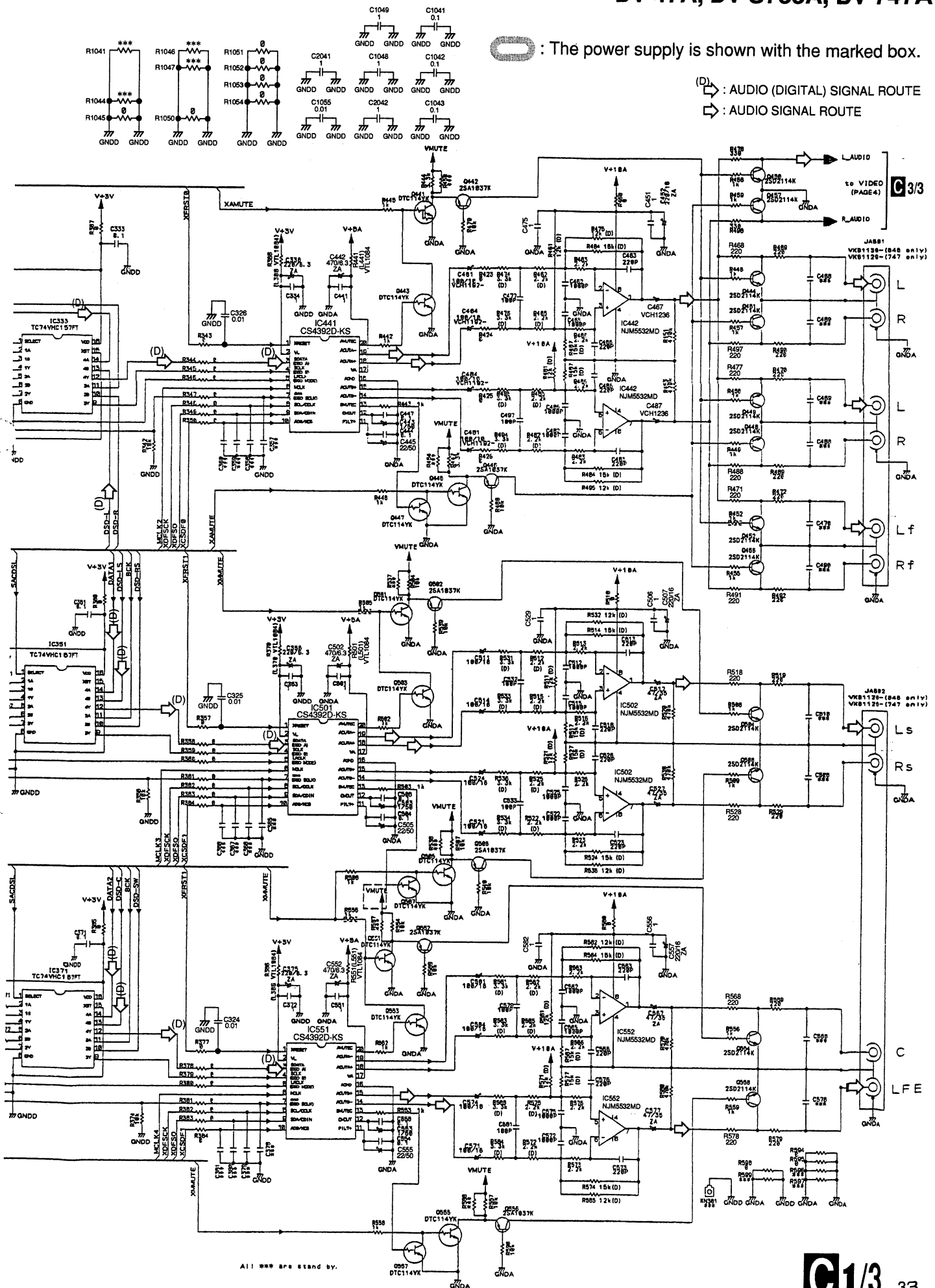




## DV-47A, DV-S733A, DV-747A

 : The power supply is shown with the marked box.

(D) : AUDIO (DIGITAL) SIGNAL ROUTE  
 : AUDIO SIGNAL ROUTE









5

(V) → : V SIGNAL ROUTE

(Y) → : Y SIGNAL ROUTE

(C) → : C SIGNAL ROUTE

(VD) → : VIDEO DATA SIGNAL ROUTE

6

(R) → : R SIGNAL ROUTE

(G) → : G SIGNAL ROUTE

(B) → : B SIGNAL ROUTE

(Cb) → : Cb SIGNAL ROUTE

7

(Cr) → : Cr SIGNAL ROUTE

(P-Y) → : PROGRESSIVE SCAN VIDEO SIGNAL ROUTE [Y]

(P-Cb) → : PROGRESSIVE SCAN VIDEO SIGNAL ROUTE [Cb]

(P-Cr) → : PROGRESSIVE SCAN VIDEO SIGNAL ROUTE [Cr]

8

**DV-47A, DV-S733A, DV-747**

<INTERFERENCE V/Y/C OUT>

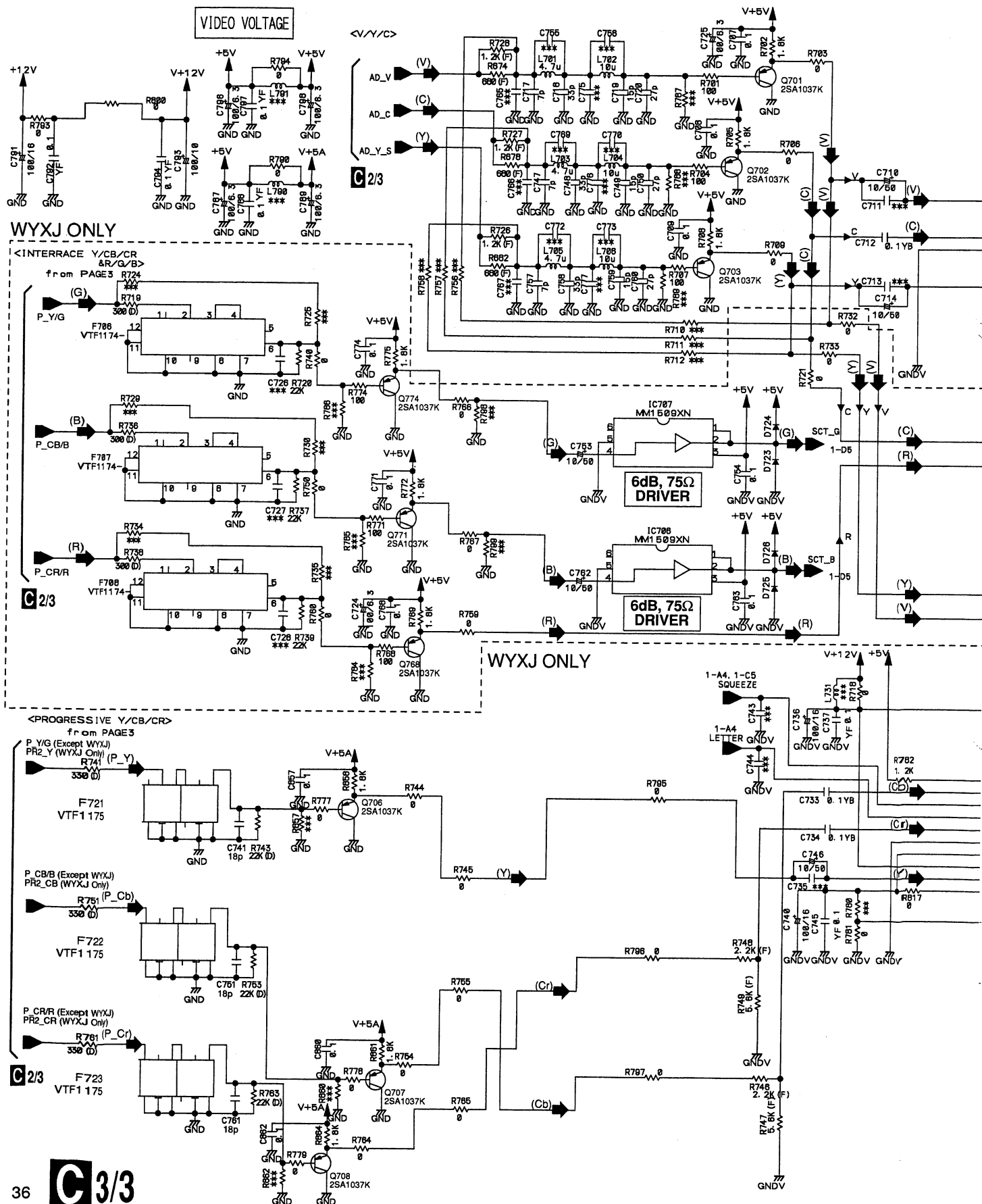


**10** : The power supply is shown with the marked box.



# 3.9 AVJB ASSY (3/3)

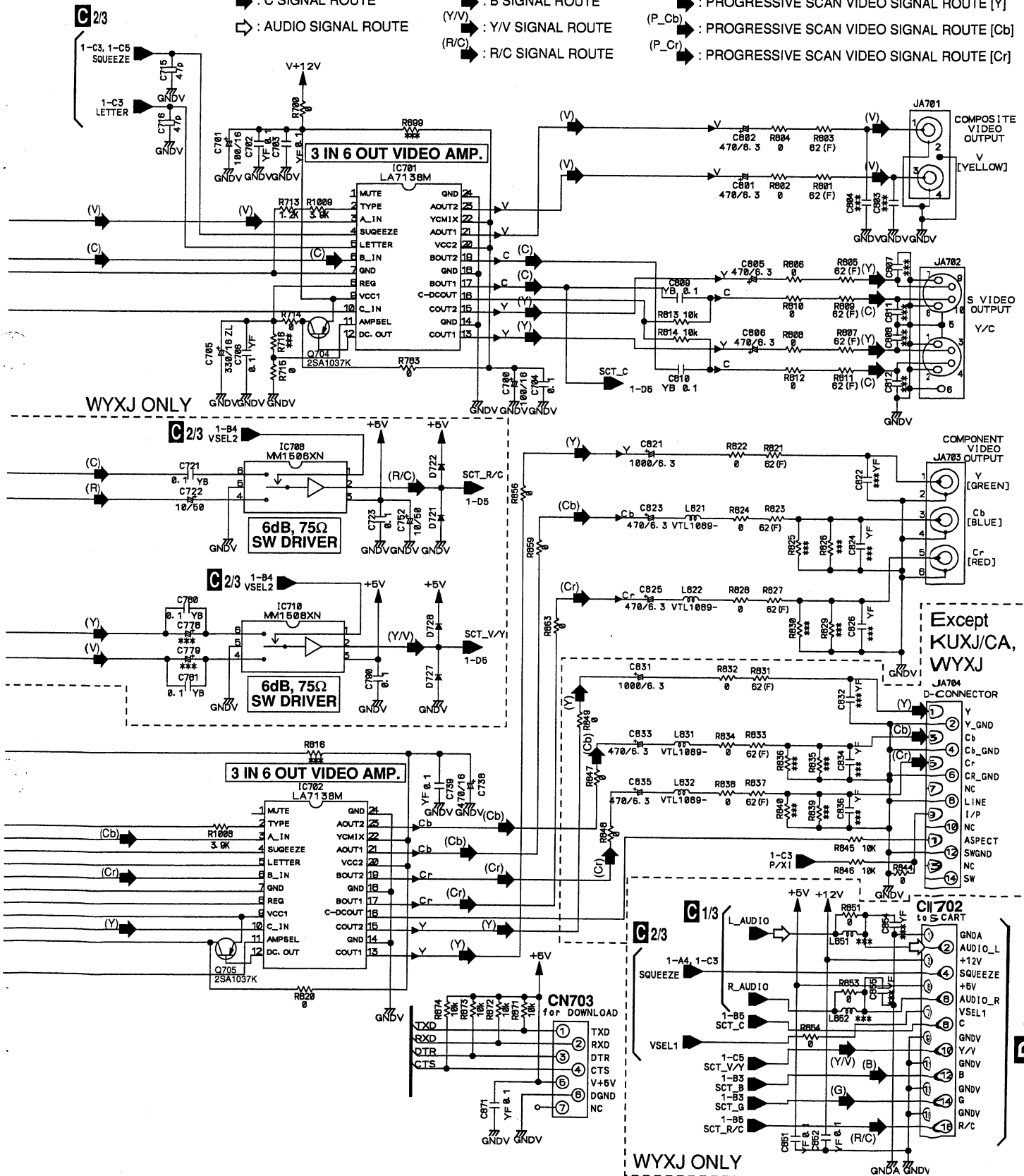
**C3/3** AVJB ASSY  
 (KUXJ/CA : VWV1874)  
 (LBXJ : VWV1877)  
 (WLXJ/NC, WLXJ/RD : VWV1875)  
 (WYXJ : VWV1876)





## DV-47A, DV-S733A, DV-747A

- (V) : V SIGNAL ROUTE  
(Y) : Y SIGNAL ROUTE  
(C) : C SIGNAL ROUTE  
□ : AUDIO SIGNAL ROUTE
- (R) : R SIGNAL ROUTE  
(G) : G SIGNAL ROUTE  
(B) : B SIGNAL ROUTE  
(Y/V) : Y/V SIGNAL ROUTE  
(R/C) : R/C SIGNAL ROUTE
- (Cb) : Cb SIGNAL ROUTE  
(Cr) : Cr SIGNAL ROUTE  
(P\_Y) : PROGRESSIVE SCAN VIDEO SIGNAL ROUTE [Y]  
(P\_Cb) : PROGRESSIVE SCAN VIDEO SIGNAL ROUTE [Cb]  
(P\_Cr) : PROGRESSIVE SCAN VIDEO SIGNAL ROUTE [Cr]

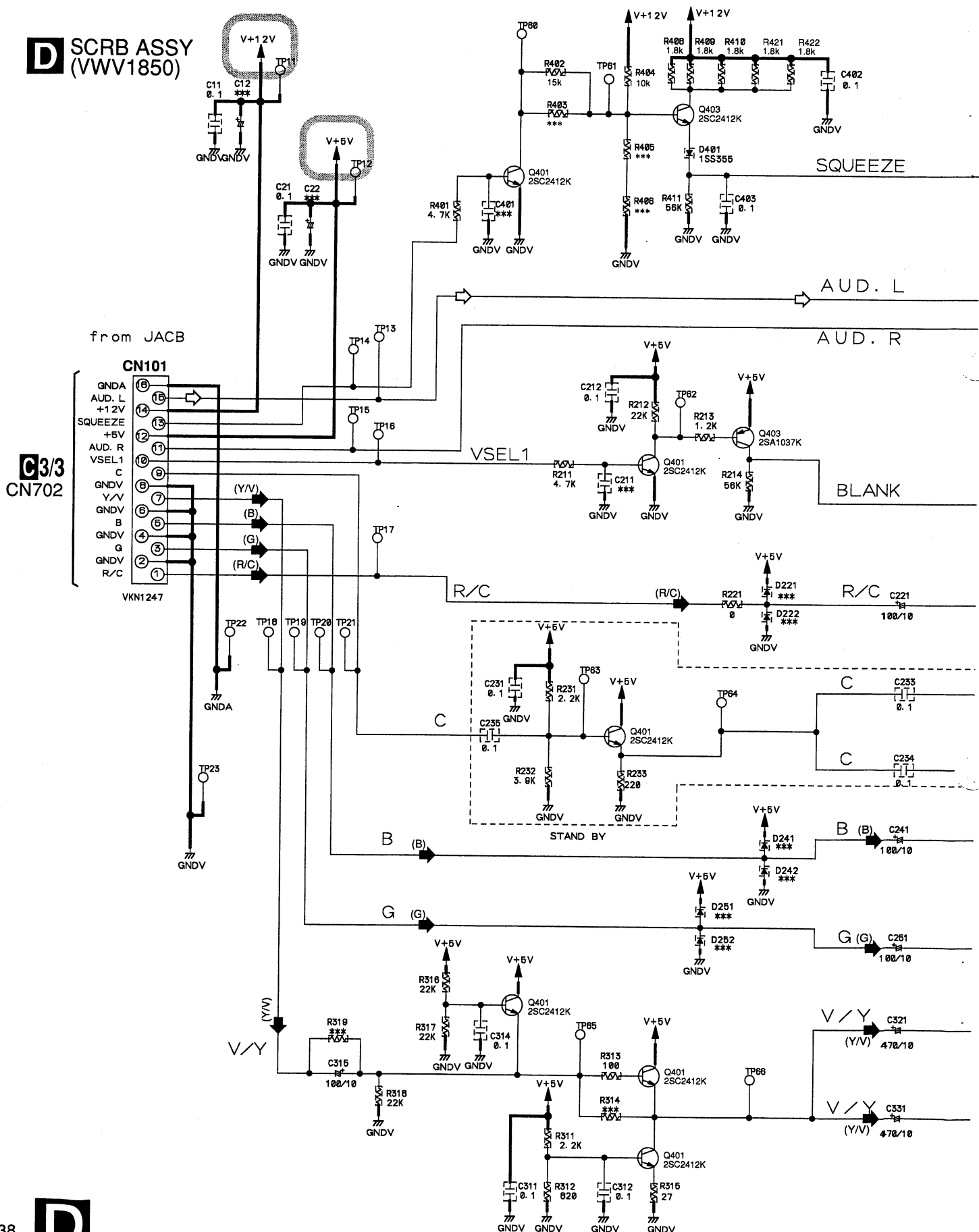


All \*\*\* are Stand by.



### 3.10 SCRIB ASSY [WYXJ TYPE ONLY]

#### D SCRIB ASSY (VWV1850)









# 3.11 FLIR, PWSB, KEYB and DILB ASSYS

**E** FLIR ASSY  
(KUXJ/CA : VWG2327)  
(LBXJ : VWG2325)  
(WLXJ/NC : VWG2324)  
(WLXJ/RD : VWG2324)  
(WYXJ : VWG2326)

Note1

Model No.	A'ssy No.	Destination		Model Select						
		R141	R142	R145	R146	R147	R148	R149	R150	
DV-47A/KUXJ/CA	VWG2327-	39k	100k	0	***	***	0	0	***	
DV-S733A/LBXJ	VWG2325-	15k	12k	0	***	***	0	0	***	
DV-S733A/WLXJ/RD, WLXJ/RD	VWG2324-	68k	27k	0	***	***	0	0	***	
DV-747A/WYXJ	VWG2326-	33k	47k	0	***	***	0	0	***	

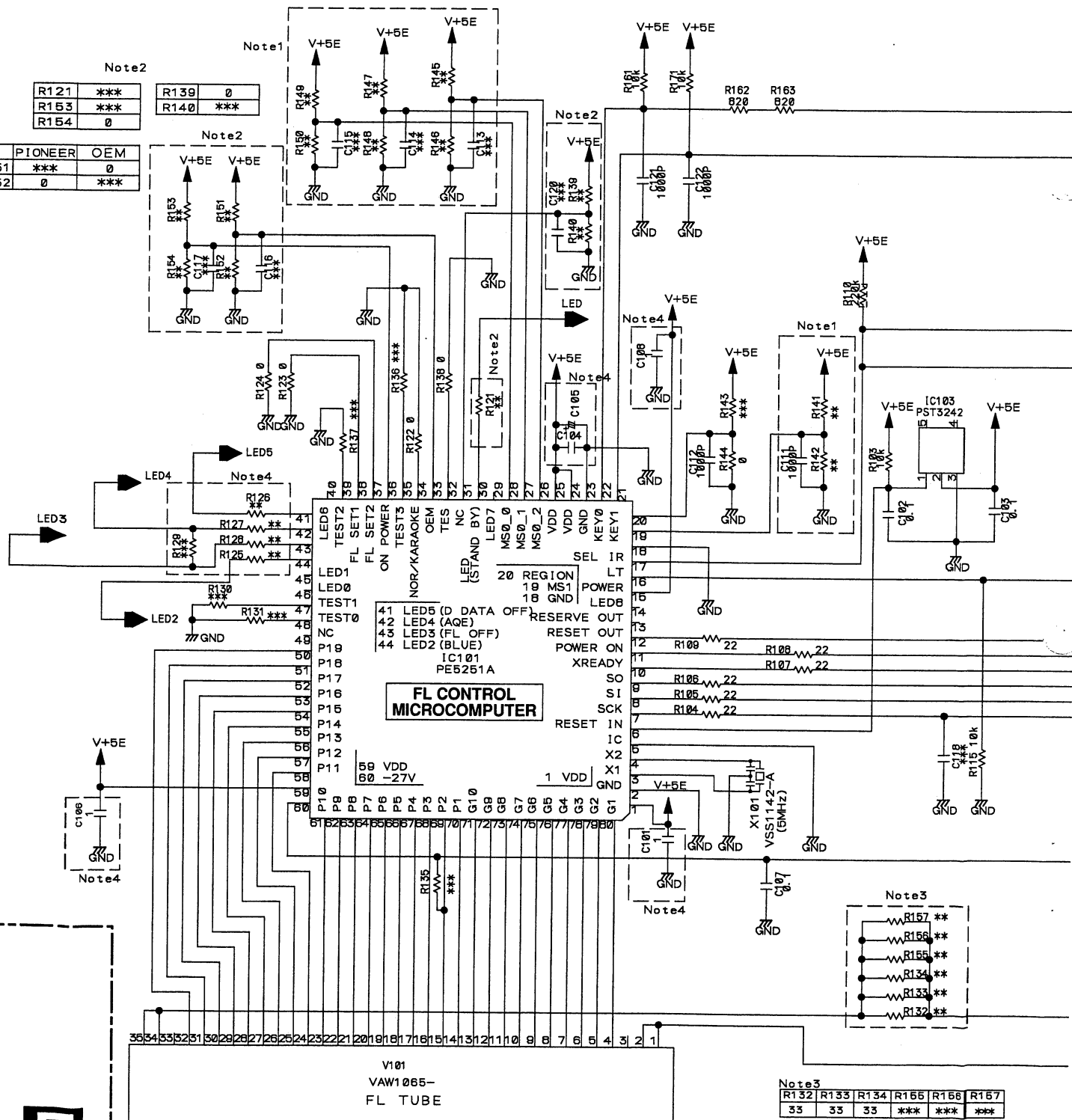
Note4

	R125	R126	R127	R128	R129	C101	C104	C105	C106	C108
KUXJ/CA	***	***	***	220	0	1	1	47	1	1
Others	0	680	680	220	***	1	1	47	1	1

Note2

	PIONEER	OEM
R121	***	0
R151	***	0
R152	0	***

R139	0
R140	***



Note3

R132	R133	R134	R155	R156	R157
33	33	33	***	***	***

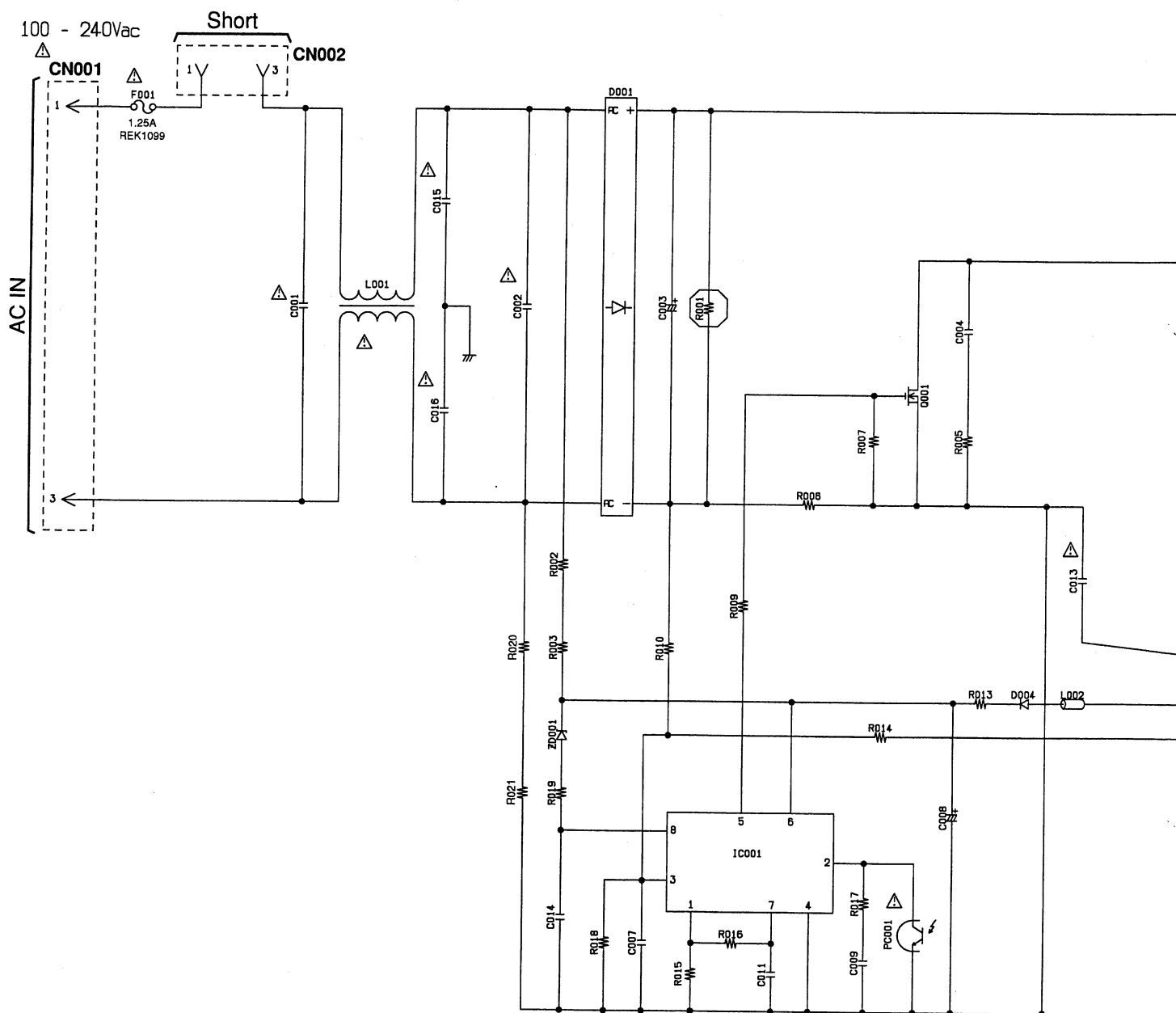






**« NOTE OF SPARE PARTS IN POWER SUPPLY (SYPS) UNIT »**

- In case of repairing, use the described parts only to prevent an accident.
- Please write the red ✓ mark on the board when the primary section of POWER SUPPLY (SYPS) Unit is repaired.
- Please take care to keep the space, not touching other parts when replacing the parts.

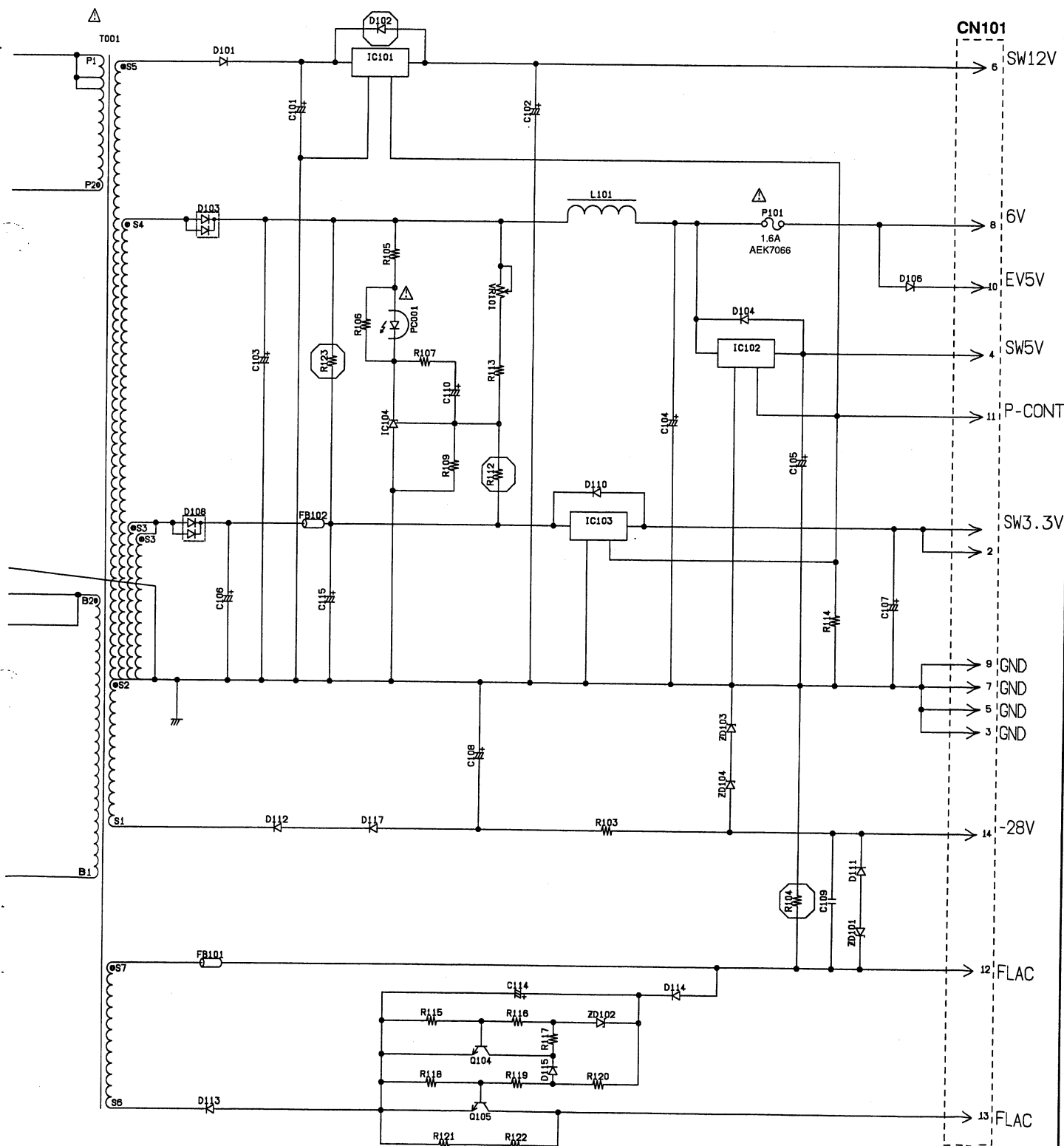


**CAUTION** -FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.  
REPLACE WITH SAME TYPE AND RATINGS ONLY.



**DV-47A, DV-S733A, DV-747A**

**CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.  
REPLACE ONLY WITH SAME TYPE NO. 49101.6 MFD,  
BY LITTELFUSE INC. FOR P101 (AEK7066).**



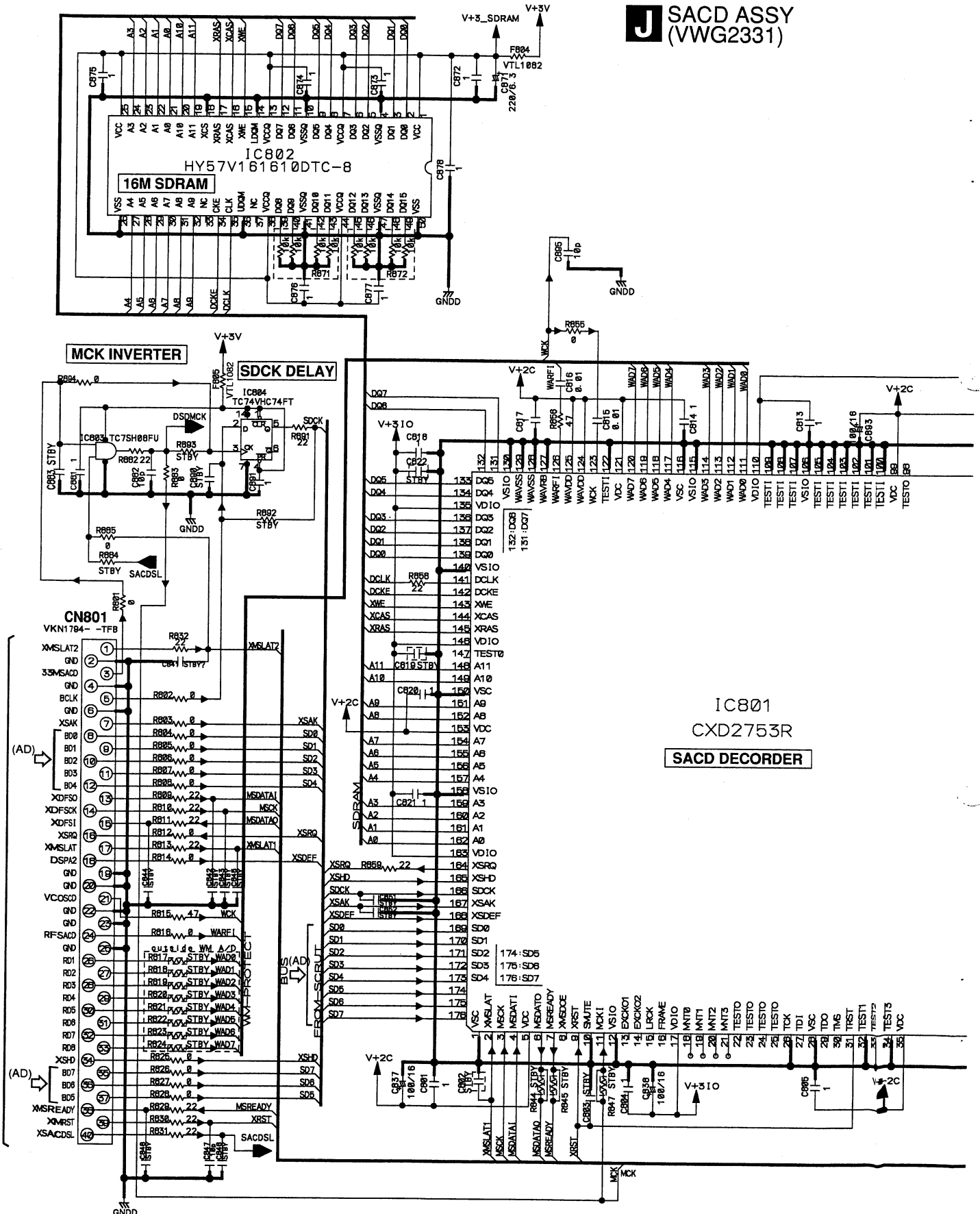
**C1/3 CN303**



### 3.13 SACD ASSY

**J** SACD ASSY  
(VWG2331)

**B2/4 CN602**









## WAVEFORMS

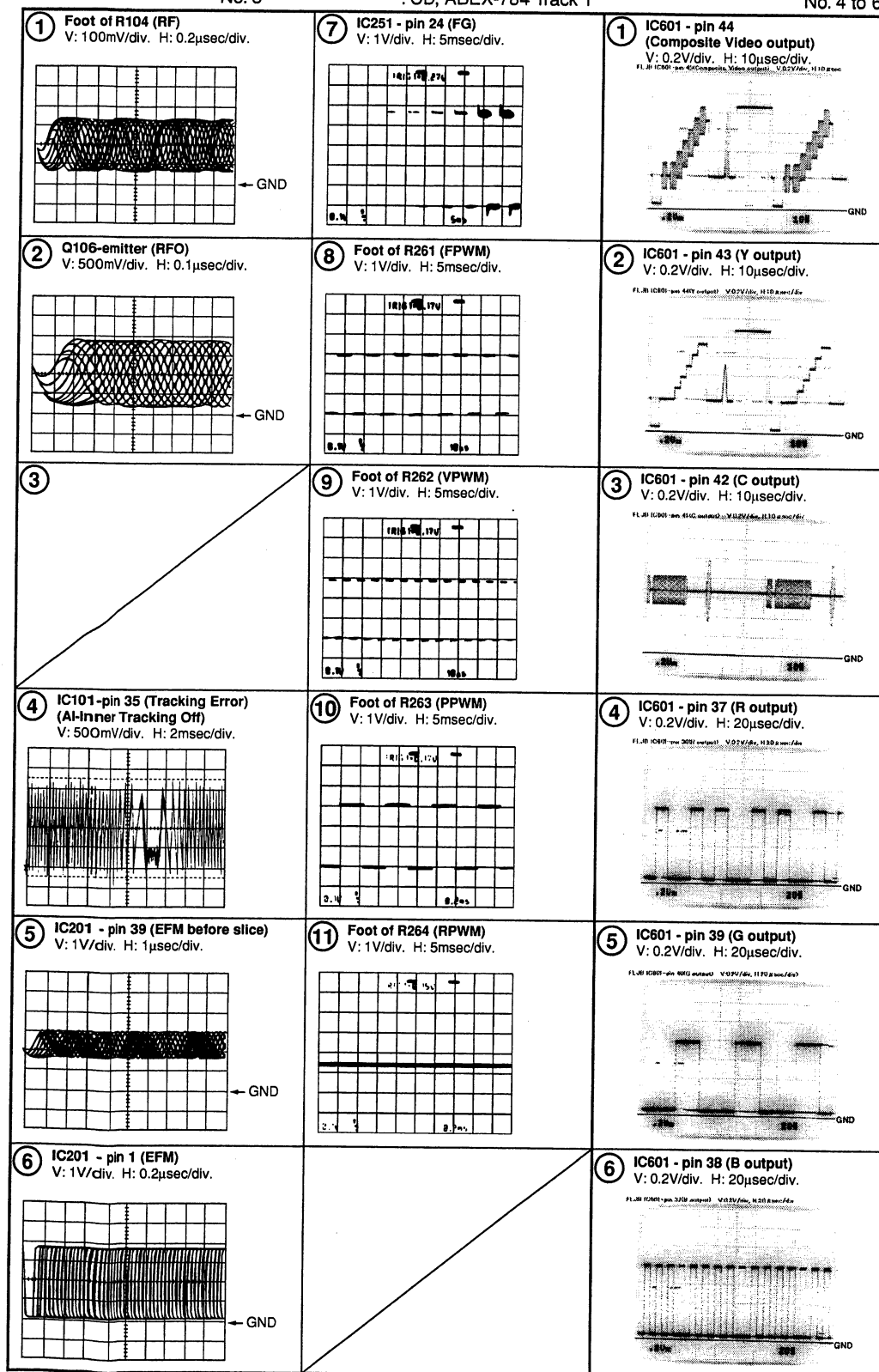
Note : The encircled numbers denote measuring point in the schematic diagram.

### B DVDM ASSY

Measurement condition : No. 1 to 4 and 6 to 11 : MJK1, Title 1-chp 1  
No. 5 : CD, ABEX-784 Track 1

### C AVJB ASSY

Measurement condition : No. 1 to 3 : MJK1, Title 1-chp 4  
No. 4 to 6 : T2-19, Color-bar





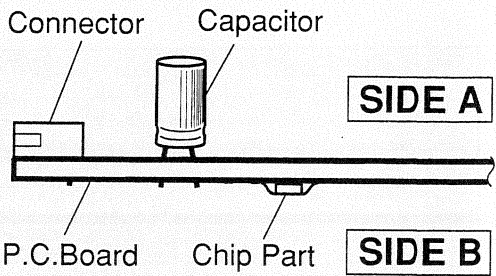
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

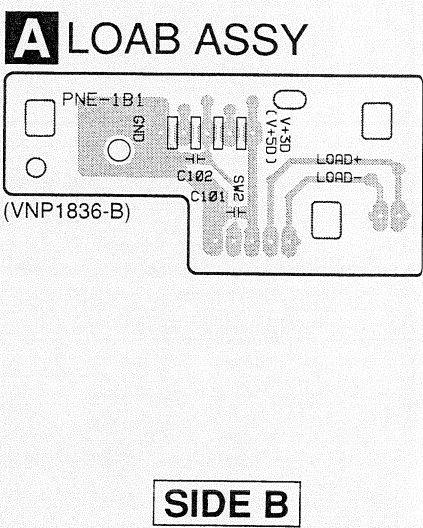
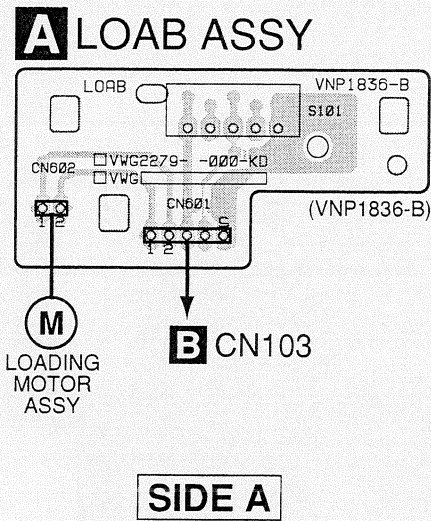
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destinations.
- For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



4.1 LOAB ASSY

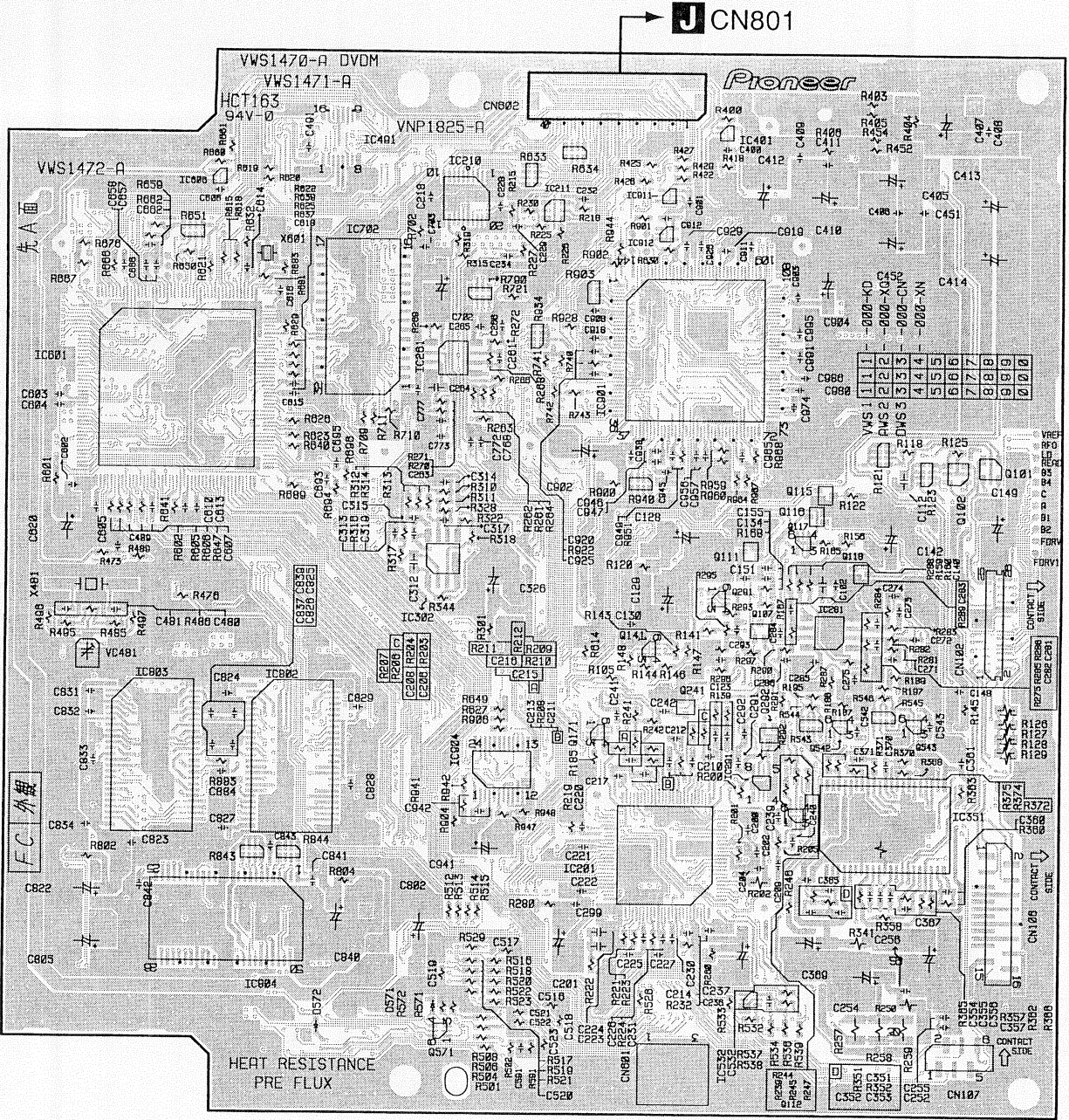




# 4.2 DVD M ASSY

**B** DVD M ASSY

**SIDE A**



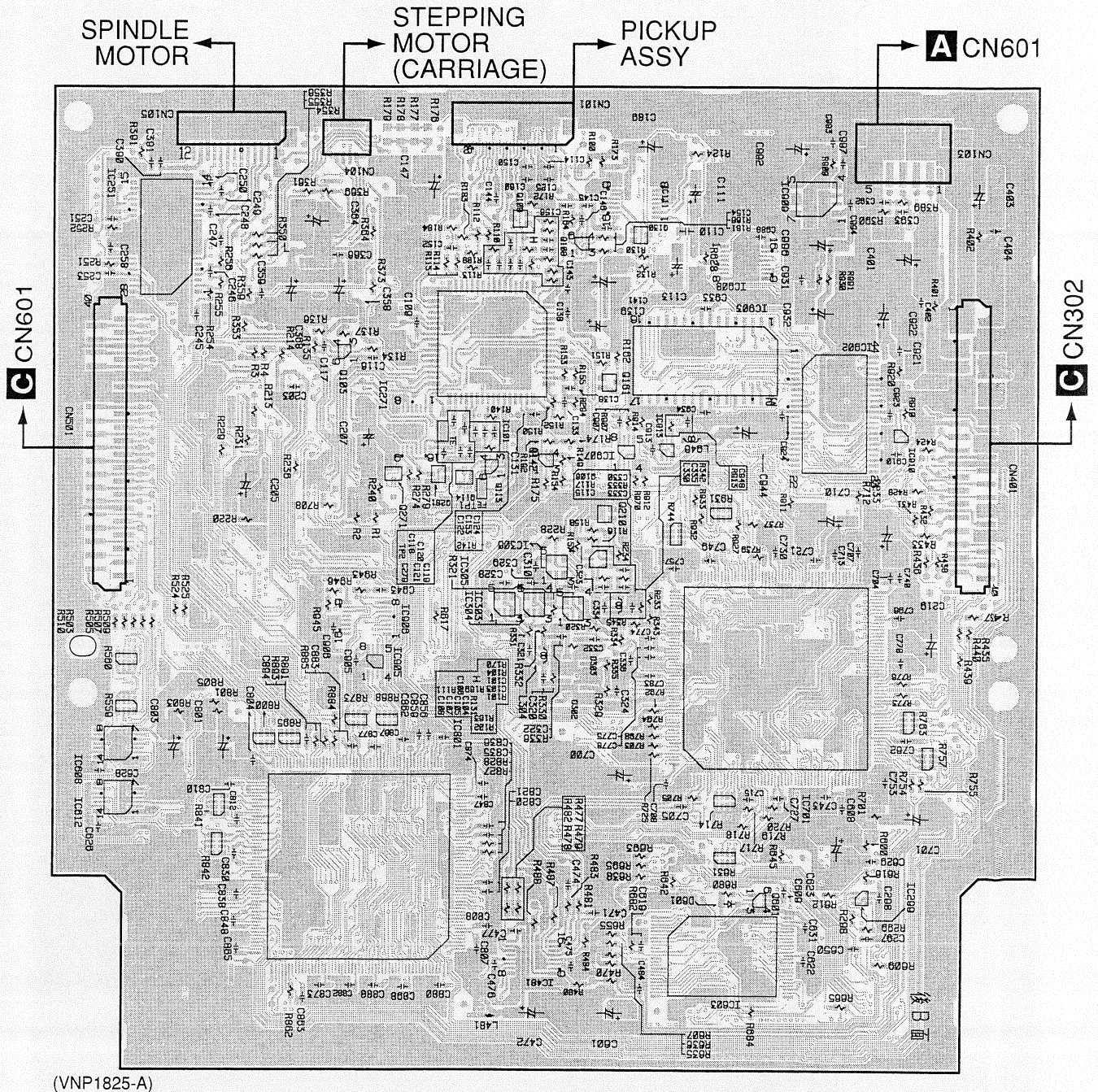
IC401	IC911	IC912	IC901	Q101	Q118	IC281	GS43	IC351	IC532
IC211	IC210		IC261	Q102	Q116	Q107	GS42	Q112	GS71
IC491		IC702	IC601	Q115	Q117	C991	Q292	IC9291	
IC806				Q111	Q111	Q141	Q241	IC904	IC904
				IC302				IC802	IC803

(VNP1825-A)



SIDE B

B DVDM ASSY



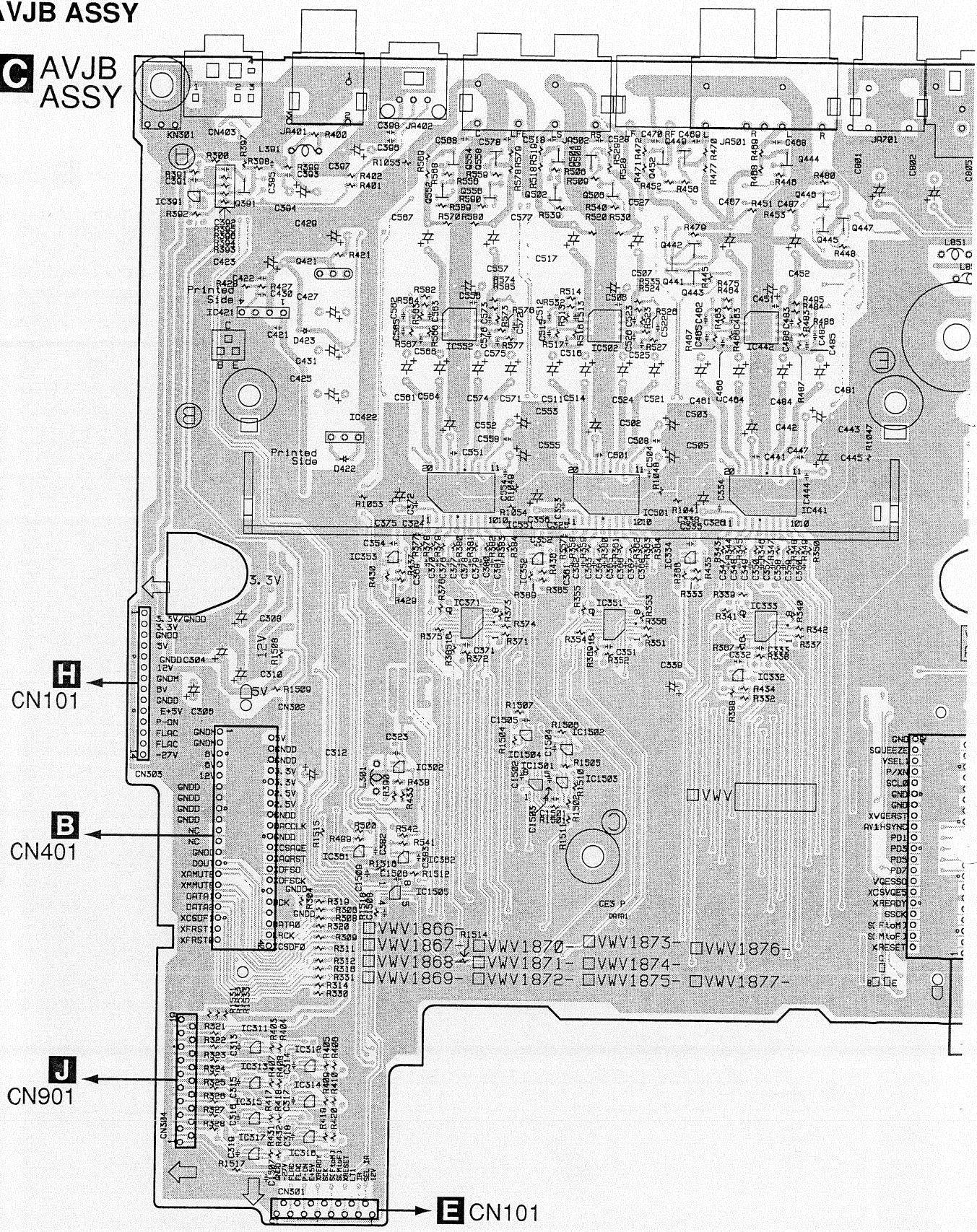
(VNP1825-A)

IC251 IC103 IC271 Q109 Q108 Q130 IC903 IC909 IC910  
 IC608 Q271 Q281 IC101 Q142 Q161 IC913 IC701 IC902  
 IC612 IC905 Q113 IC907 Q601 IC299  
 IC801 IC306 Q210 Q106  
 IC304 IC303 IC305



4.3 AVJB ASSY

**C** AVJB ASSY



**H** CN101

**B** CN401

**J** CN901

**E** CN101

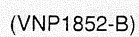
IC391	Q391	Q421	Q554	Q558	Q504	Q508	Q452	Q449	Q444	Q447
IC421	IC422	IC353	Q552	Q556	IC352	IC502	Q441	IC442	Q446	
IC311	IC312	IC361	IC552	IC551	IC501	IC351	Q443	IC441	Q445	
IC313	IC314	IC362	IC371				IC334	IC332		
IC315	IC316	IC302								
IC317		IC362								
		IC1505			IC1504	IC1502				
					IC1501	IC1503				







A



Q450 Q4:

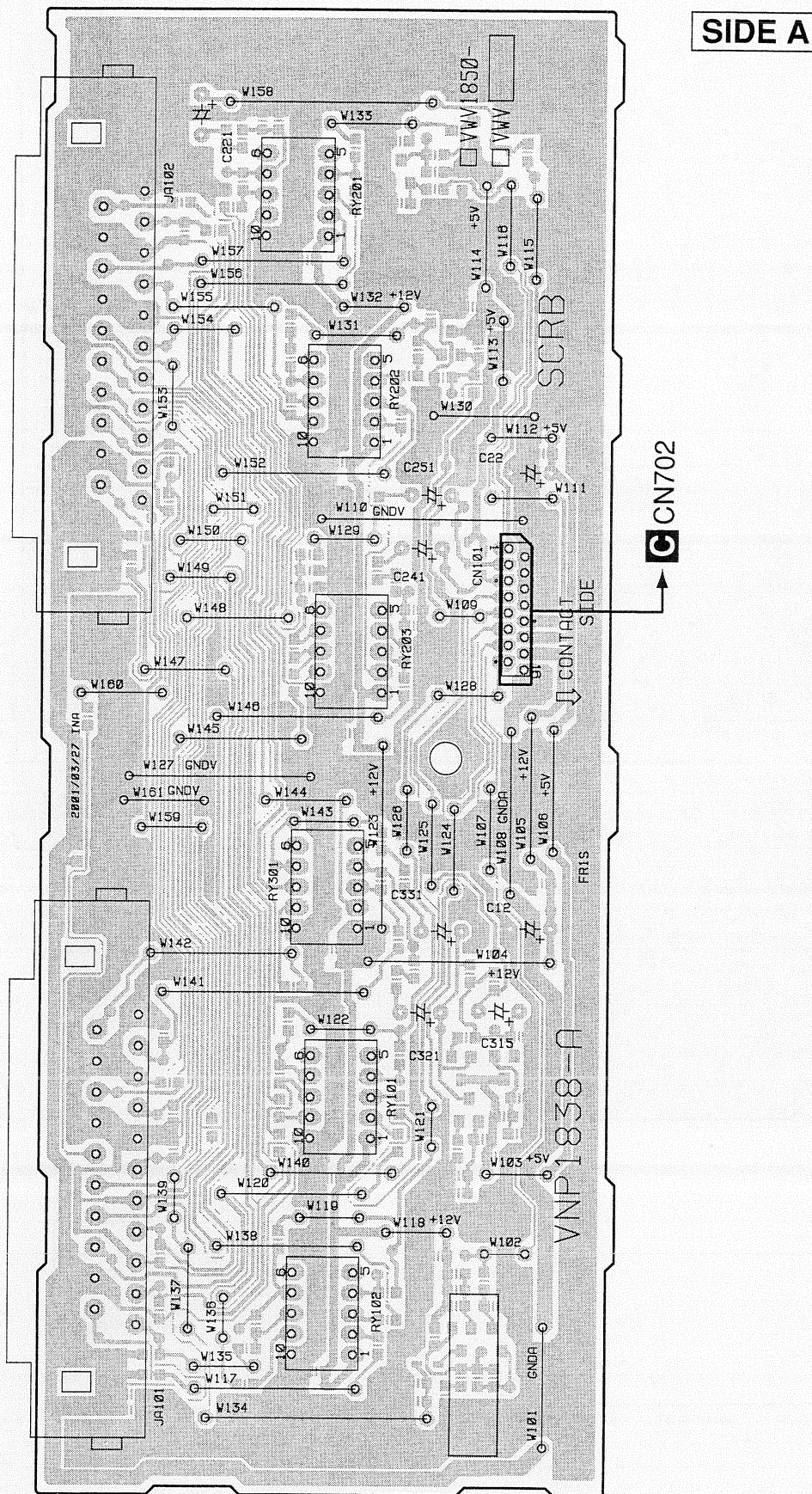






# 4.4 SCRB ASSY (For WYXJ Type)

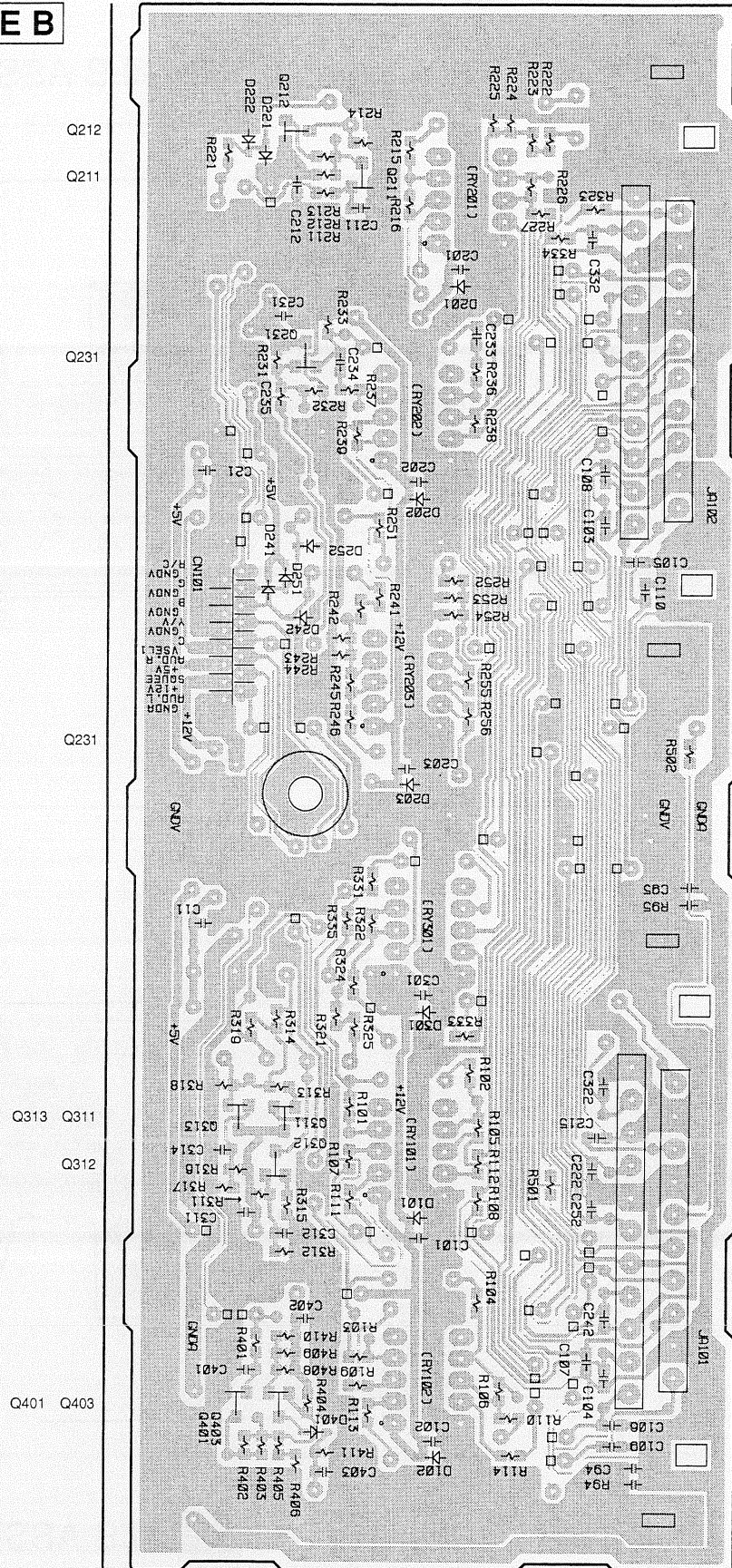
## D SCRB ASSY





**D** SCRB ASSY

**SIDE B**

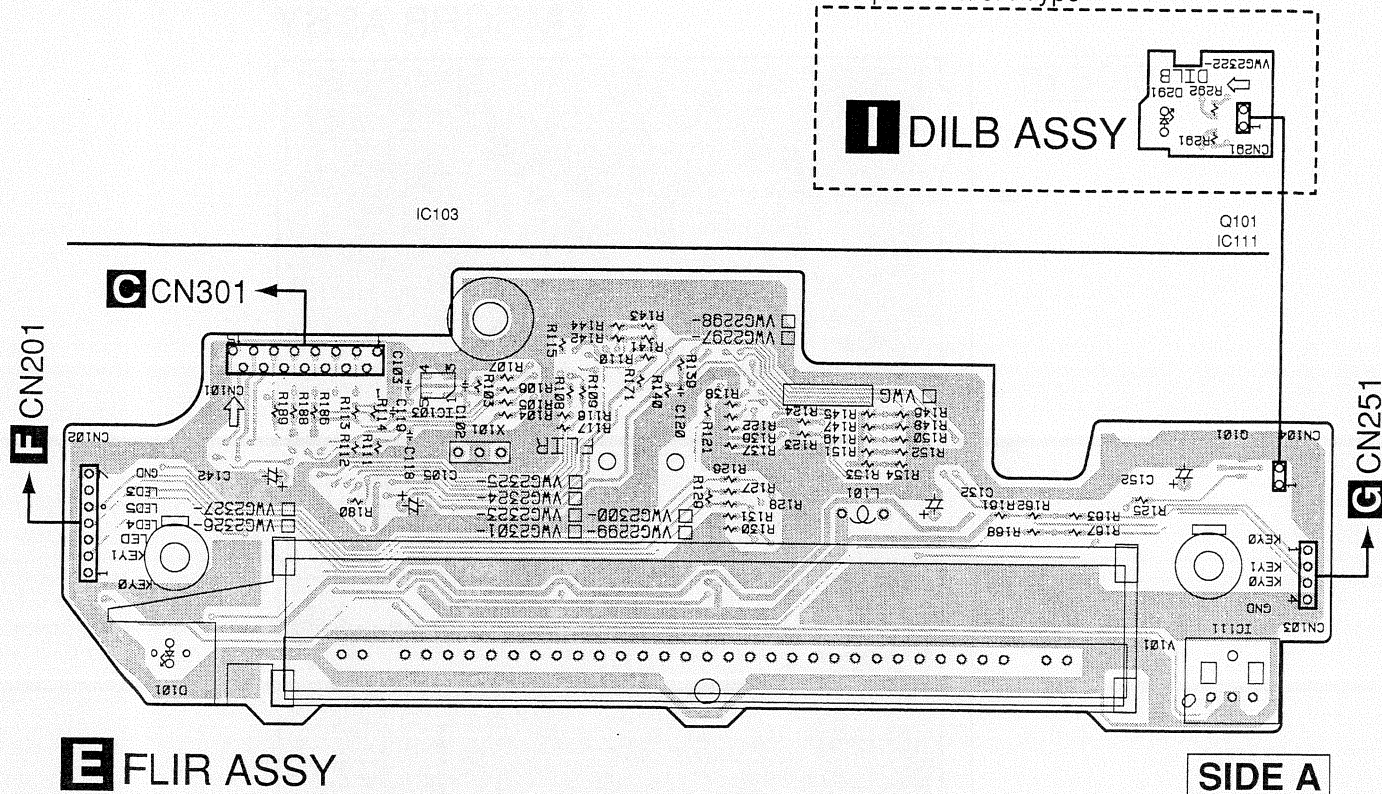


(VNP1838-A)

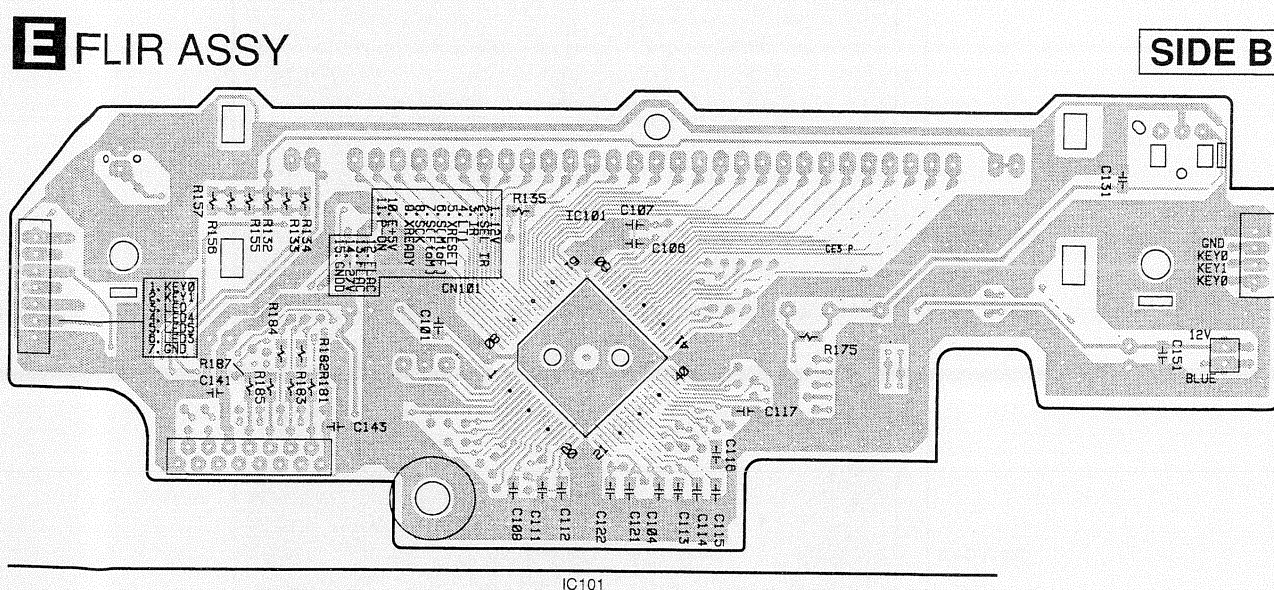


#### 4.5 FLIR, DILB ASSY

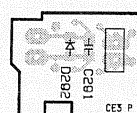
Except KUXJ/CA Type



(VNP1852-B)

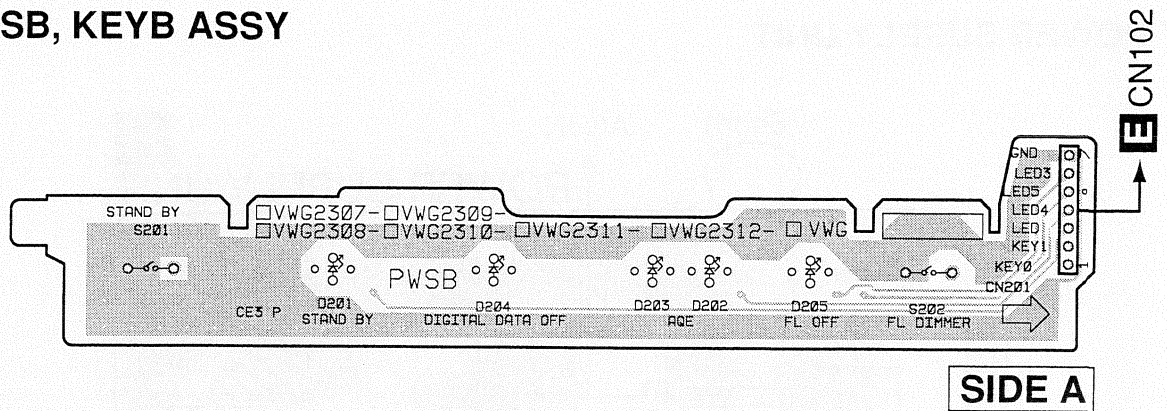


## DILB ASSY



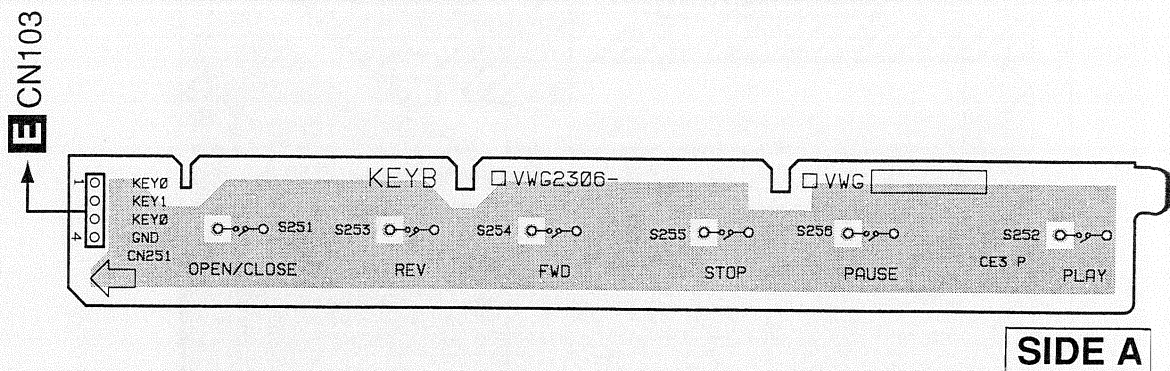
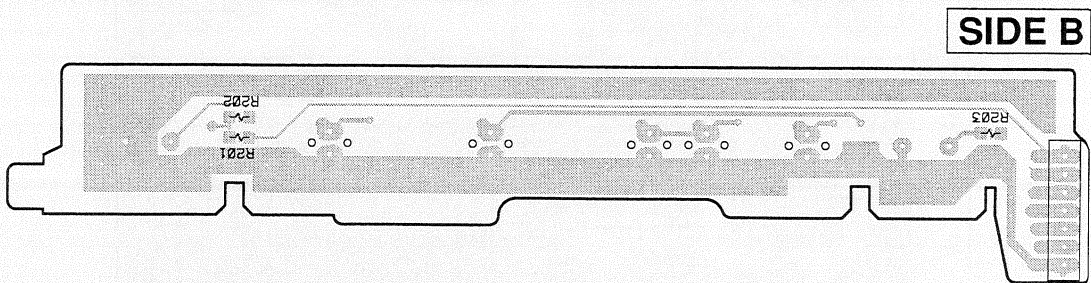


## 4.6 PWSB, KEYB ASSY



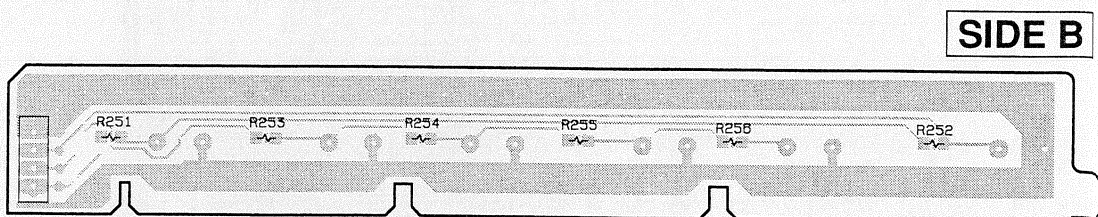
## F PWSB ASSY

(VNP1852-B)



## G KEYB ASSY

(VNP1852-B)

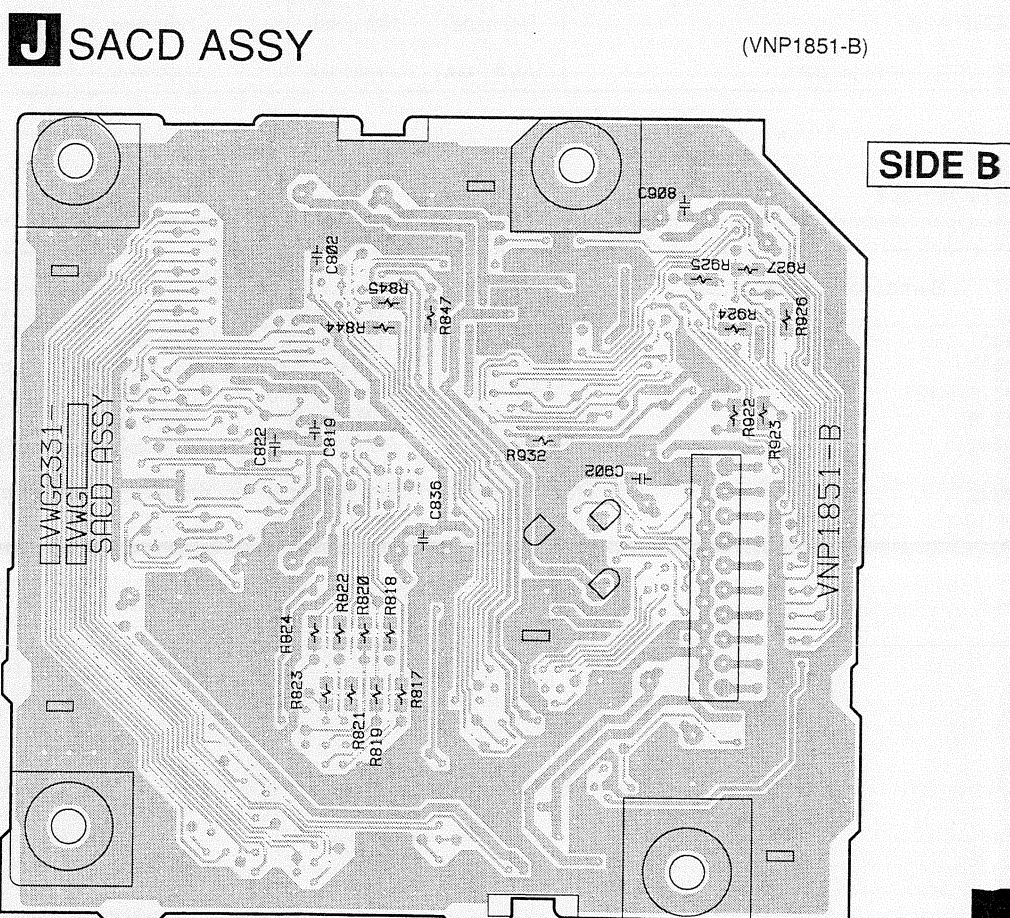
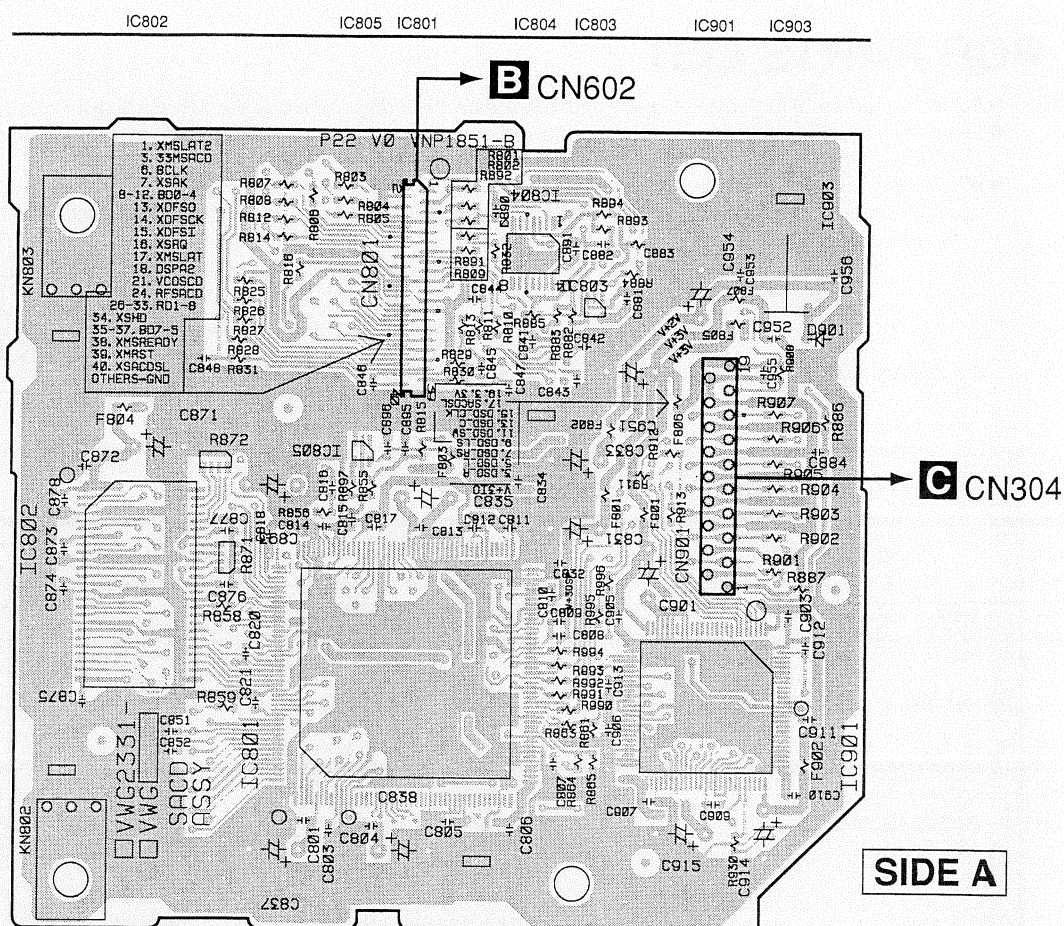








## 4.8 SACD ASSY





## 5. PCB PARTS LIST

- NOTES: ●Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.  
 ●The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part.  
 Therefore, when replacing, be sure to use parts of identical designation.  
 ●When ordering resistors, first convert resistance values into code form as shown in the following examples.  
 Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).  
 $560 \Omega \rightarrow 56 \times 10^1 \rightarrow 561 \dots\dots\dots RD1/4PU \boxed{5} \boxed{6} \boxed{1} J$   
 $47k \Omega \rightarrow 47 \times 10^3 \rightarrow 473 \dots\dots\dots RD1/4PU \boxed{4} \boxed{7} \boxed{3} J$   
 $0.5 \Omega \rightarrow R50 \dots\dots\dots RN2H \boxed{R} \boxed{5} \boxed{0} K$   
 $1 \Omega \rightarrow 1R0 \dots\dots\dots RS1P \boxed{1} \boxed{R} \boxed{0} K$   
 Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).  
 $5.62k \Omega \rightarrow 562 \times 10^1 \rightarrow 5621 \dots\dots\dots RN1/4PC \boxed{5} \boxed{6} \boxed{2} \boxed{1} F$

### ■ LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	Part No.					Remarks
		DV-47A /KUXJ/CA	DV-S733A /LBXJ	DV-S733A /WLXJ/NC	DV-S733A /WLXJ/RD	DV-747A /WYXJ	
NSP	LOADING MECHANISM ASSY	VWT1188	VWT1188	VWT1188	VWT1188	VWT1188	
NSP	└ LOAB ASSY	VWG2279	VWG2279	VWG2279	VWG2279	VWG2279	
	DVDM ASSY	VWS1471	VWS1471	VWS1471	VWS1471	VWS1471	
NSP	FLJB ASSY	VWM2108	VWM2111	VWM2109	VWM2110	VWM2110	
	└ FLIR ASSY	VWG2327	VWG2325	VWG2324	VWG2326	VWG2326	
NSP	└ KEYB ASSY	VWG2306	VWG2306	VWG2306	VWG2306	VWG2306	
NSP	└ PWSB ASSY	VWG2312	VWG2310	VWG2310	VWG2311	VWG2311	
	└ AVJB ASSY	VWV1874	VWV1877	VWV1875	VWV1876	VWV1876	
NSP	└ DILB ASSY	Not used	VWG2322	VWG2322	VWG2322	VWG2322	
NSP	SACD ASSY	VWG2331	VWG2331	VWG2331	VWG2331	VWG2331	
	SCRB ASSY	Not used	Not used	Not used	VWV1850	VWV1850	
$\Delta$	POWER SUPPLY UNIT	VWR1346	VWR1346	VWR1346	VWR1346	VWR1346	

### **E** FLIR ASSY

VWG2327, VWG2325, VWG2324 and VWG2326 are constructed the same except for the following :

Mark	Symbol and Description	Part No.				Remarks
		VWG2327	VWG2325	VWG2324	VWG2326	
	Q101	Not used	DTC124EK	DTC124EK	DTC124EK	
	R125	Not used	RS1/16S0R0J	RS1/16S0R0J	RS1/16S0R0J	
	R126, R127	Not used	RS1/16S681J	RS1/16S681J	RS1/16S681J	
	R129	RS1/16S0R0J	Not used	Not used	Not used	
	R141	RS1/16S393J	RS1/16S153J	RS1/16S683J	RS1/16S333J	
	R142	RS1/16S104J	RS1/16S123J	RS1/16S273J	RS1/16S473J	
	CN104 CONNECTOR	Not used	S2B-PH-K-S	S2B-PH-K-S	S2B-PH-K-S	



**F PWSB ASSY**

VWG2312, VWG2310 and VWG2311 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		VWG2312	VWG2310	VWG2311	
	D202 D203 D204, D205 S202 R203	SLR-56VC(NPQ) Not used Not used ASG7013 RS1/16S0R0	Not used SLR-56DC(NPQ) SLR-56VC(NPQ) Not used Not used	Not used SLR-56DC(NPQ) SLR-56VC(NPQ) Not used Not used	

**■ PCB PARTS LIST FOR DV-47A/KUXJ/CA UNLESS OTHERWISE NOTED**

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
<b>A LOAB ASSY</b>					Q114, Q130		2SC4081
<b>SWITCHES AND RELAYS</b>					Q107, Q111, Q115, Q241, Q271		DTC114EUA
S101 REAF SWITCH			VSK1011		Q281		DTC114EUA
<b>OTHERS</b>					Q101, Q102, Q106		HN1A01F
CN602 CONNECTOR			S2B-PH-K		Q103, Q141, Q142, Q542, Q543		HN1B04FU
CN601 CONNECTOR			S5B-PH-K		Q112, Q113		HN1C01FU
PRINTED CIRCUIT BOARD			VNP1836		Q108		HN1K03FU
					Q571		RN1911
					Q117, Q171, Q601		RN4982
					D302, D303		KV1470
					D601		RB501V-40

**B DVDM ASSY****SEMICONDUCTORS**

IC261, IC281, IC302	BA4510F
IC251	BA6664FM
IC481	BU2288FV
IC702	GM71VS65803CLT-5
IC802	HY57V161610DTC-8
IC902	IS61LV6416-12T
IC903	IS63LV1024-12T
IC101	LA9701M
IC201	LC78652W
IC904	LC89051V
IC351	M56788AFP
IC804	M5M4V18165DTP-6S
IC801	M65774BFP
IC909	MM1561JF
IC601	PD6345A
IC701	PE5220A
IC111, IC271	TC74HC4053AFT
IC612	TC74VHC125FT
IC491	TC74VHC153FT
IC906, IC908	TC74VHC157FT
IC608	TC74VHCT125AFT
IC401, IC911-IC913	TC7SH04FU
IC532	TC7SH32FU
IC303, IC304, IC306	TC7SZU04F
IC907	TC7WH125FU
IC905	TC7WH157FU
IC211	TK15404M
IC603	VYW1896
IC901	XCA56367PV150
Q109, Q210	2SA1576A

**COILS AND FILTERS**

L946	LCYA1ROJ2520
L304	LCYA1R5J2520
L315, L418, L489, L893	CHIP BEADS
L516-L523	CHIP BEADS
L481	CHIP BEADS
	VTL1082
	VTL1083
	VTL1084

**CAPACITORS**

C480, C481, C516-C523, C662	CCSRCH100D50
C152	CCSRCH101J50
C104-C108, C314	CCSRCH150J50
C151	CCSRCH270J50
C324, C391, C392	CCSRCH331J50
C146	CCSRCH390J50
C122, C123	CCSRCH391J50
C116, C134, C283, C284, C297	CCSRCH470J50
C145, C241	CCSRCH560J50
C281, C282	CCSRCH5R0C50
C286	CCSRCH680J50
C117, C360	CCSRCH681J50
C124	CCSRCH820J50
C128, C142, C189, C201, C233	CEV101116
C254, C358, C364, C368, C369	CEV101116
C401, C407, C413, C944	CEV101116
C113, C139	CEV220116
C147, C219, C237, C326, C410	CEV221116
C620, C701, C710, C803, C822	CEV221116
C902, C992	CEV221116
C111, C207	CEV470116R3
C140, C223, C224, C264, C312	CKSQYB105K10
C209, C211, C216, C275, C313	CKSQYB102K50
C351	CKSQYB102K50
C133, C136, C203, C220, C225	CKSQYB103K50



# DV-47A, DV-S733A, DV-747A

Mark	No.	Description	Part No.
	C234, C239, C261, C320-C322 C330, C591, C619, C705, C707 C943, C947 C101, C103, C118-C120 C212, C213, C227, C231	CKSRYB103K50 CKSRYB103K50 CKSRYB103K50 CKSRYB104K16 CKSRYB104K16	
	C248-C251, C255, C263, C315 C317 C208, C210 C271-C274 C266	CKSRYB104K16 CKSRYB104K16 CKSRYB222K50 CKSRYB223K50 CKSRYB224K10	
	C206, C214, C242, C357 C946 C102, C121, C138, C143, C154 C256, C279, C285, C332, C353 C359, C365, C366, C402	CKSRYB472K50 CKSRYB473K50 CKSRYF104Z25 CKSRYF104Z25 CKSRYF104Z25	
	C475-C477, C609, C768 C772, C773 C109, C114, C115, C125 C130, C131, C144, C148, C150 C160, C200, C202, C204, C215	CKSRYF104Z25 CKSRYF104Z25 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10	
	C217, C221, C222, C226, C230 C232, C236, C253, C258, C265 C298, C299, C310, C319 C328, C329, C361, C393, C400 C404, C406, C408, C411, C451	CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10	
	C491, C532, C542, C543 C602-C605, C607, C608, C610 C613-C616, C618, C622, C626 C628, C631, C657, C658 C703, C704, C708, C715, C721	CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10	
	C727, C730, C740, C743, C749 C753, C757, C762, C774-C778 C783, C796, C804, C807, C808 C810, C812, C820, C821 C823-C830, C835, C836, C838	CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10	
	C841-C843, C847, C848, C856 C859, C862, C863, C865, C867 C873, C874, C877, C880 C882, C883, C888, C894, C898 C901, C903, C905-C908	CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10	
	C911-C913, C918-C920 C923-C926, C929, C933, C934 C938, C942, C945, C948, C949 C956, C957, C965, C974, C980 C986, C988, C991, C993-C995	CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10	
	C129, C149, C403 (100μF/6.3V) C205, C405, C452 (150μF/4V) C472, C601 (150μF/4V) C623, C700, C702 (150μF/4V) C801, C840 (150μF/4V)	VCH1194 VCH1195 VCH1195 VCH1195 VCH1195	
	C904, C941, C996 (150μF/4V) C367 (33μF/16V)	VCH1195 VCH1197	

## RESISTORS

R800, R895 R543, R545, R631, R714, R744 R903, R931, R934, R940 R121, R757, R763, R790, R868 R873	RAB4C0R0J RAB4C103J RAB4C103J RAB4C220J RAB4C220J
--	---

Mark	No.	Description	Part No.
	R123 R202, R341 R126-R129, R176-R179 R287 R364, R369, R373, R375		RAB4C470J RS1/10S101J RS1/10S220J RS1/16S1002F RS1/16S1003F
	R289, R358, R361 R288 R357, R362, R363, R368, R372 R374 R257 (1.0Ω, 1/4W)		RS1/16S1503F RS1/16S2201F RS1/16S6802F RS1/16S6802F VCN1127
	R258, R259 (2.2Ω, 1/4W) Other Resistors		VCN1128 RS1/16S□□□□

## OTHERS

CN602 FFC CONNECTOR CN104 4P CONNECTOR CN103 CONNECTOR FLEXIBLE CABLE CN101 FFC CONNECTOR	DKN1196 DKN1223 S5B-PH-SM3 VDA1681 VKN1787
CN401, CN501 B TO B CONNECTOR 40P CN105 12P CONNECTOR X481 (27.000MHz) X601 (16.5MHz)	VKN1788 VKN1795 VSS1159 VSS1160

## C AVJB ASSY (VWV1874 : KUXJ/CA)

### SEMICONDUCTORS

△ IC601 IC301 IC921 IC441, IC501, IC551 IC902	ADV7300KST BA25BC0FP BA25BC0FP CS4392D-KS K4S643232E-TC60
△ IC701, IC702 IC442, IC502, IC552 IC422 IC331 IC901	LA7138M NJM5532MD NJM78M05FA PD0274A PM0033A
△ IC421 IC333, IC351, IC371 IC361, IC362 IC332, IC334, IC352, IC353 Q442, Q446, Q502, Q506, Q552	PQ15RW11 TC74VHC157FT TC7SH32FU TC7SHU04FU 2SA1037K
△ Q556, Q601-Q606, Q701-Q708 Q421 Q391 Q444, Q448-Q452, Q456, Q457 Q504, Q508, Q554, Q558	2SA1037K 2SC1740S 2SC2412K 2SD2114K 2SD2114K
Q441, Q443, Q445, Q447, Q501 Q503, Q505, Q507, Q551, Q553 Q555, Q557 D411, D423	DTC114YK DTC114YK DTC114YK 1SS355

### COILS AND FILTERS

L702, L704, L706 L701, L703, L705 F721-F723 12MHz LPF(VIDEO) L1020, L300, L329 CHIP BEADS L368, L370 CHIP BEADS	LAU100J LAU4R7J VTF1175 VTL1084 VTL1084
L386, L441, L473 CHIP BEADS L501, L551 CHIP BEADS L821, L822 CHIP BEADS	VTL1084 VTL1084 VTL1089



Mark	No.	Description	Part No.
<b>CAPACITORS</b>			
	C477, C497, C532, C533, C579 C581	CCSRCH101J50 CCSRCH101J50	
	C1053, C1054, C2041, C462, C465 C482, C485, C512, C515, C522 C525, C562, C565, C572, C575	CCSRCH102J50 CCSRCH102J50 CCSRCH102J50	
	C719, C749, C759 C463, C466, C483, C486, C513 C516, C523, C526, C563, C566 C573, C576 C720, C750, C760	CCSRCH150J50 CCSRCH221J50 CCSRCH221J50 CCSRCH221J50 CCSRCH270J50	
	C718, C748, C758 C412, C715, C716 C717, C741, C747, C751, C757 C761 C631	CCSRCH330J50 CCSRCH470J50 CCSRCH7R0D50 CCSRCH7R0D50 CCSRCH821J25	
	C312, C339 C710, C714, C746 C431, C511, C514, C521, C524 C561, C564, C571, C574 C700, C701, C736, C738, C793	CEAL101M6R3 CEAT100M50 CEAT101M16 CEAT101M16 CEAT101M16	
	C397, C603, C725, C752 C787, C789, C796, C798, C910 C912, C914, C918, C921, C923 C951 C821	CEAT101M6R3 CEAT101M6R3 CEAT101M6R3 CEAT101M6R3 CEAT102M6R3	
	C394, C503, C553 C801, C802, C805, C806, C823 C825 C443 C445, C505, C555	CEAT1R0M50 CEAT471M6R3 CEAT471M6R3 CEHAT1R0M50 CEHAT220M50	
	C423, C427, C791, C795 C429, C452, C507, C557 C338, C356, C375, C601 C517, C527, C567 C577	CEHAZA101M16 CEHAZA221M16 CEHAZA221M6R3 CEHAZA470M35 CEHAZA470M35	
	C425, C442, C502, C552 C705, C740 C1041-C1043, C1048, C1049 C324-C326 C712, C733, C734, C809, C810	CEHAZA471M6R3 CEHAZL331M16 CKSRYB103K50 CKSRYB103K50 CKSRYB104K16	
	C632 C920 C333, C351, C371, C382, C383 C392, C396, C398, C411, C426 C444, C447, C504, C508, C554	CKSRYB392K50 CKSRYF103Z50 CKSRYF104Z25 CKSRYF104Z25 CKSRYF104Z25	
	C558, C602, C604-C614, C619 C671-C673, C681-C683 C702-C704, C706-C709, C737 C739, C745, C788, C792, C794 C797, C857, C860, C862, C871	CKSRYF104Z25 CKSRYF104Z25 CKSRYF104Z25 CKSRYF104Z25 CKSRYF104Z25	
	C922, C924 C1044, C2042, C307, C320, C321 C331, C332, C334, C335 C352-C354, C372, C422, C424 C428, C441, C475, C501, C529	CKSRYF104Z25 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10	
	C551, C582, C911, C913, C919 C925-C950, C952-C965 C420, C421 C461, C464, C481, C484 (100μF) C467, C487 (47μF)	CKSRYF105Z10 CKSRYF105Z10 CKSRYF224Z16 VCH1192 VCH1236	

Mark	No.	Description	Part No.
<b>RESISTORS</b>			
	R961-R963 R971, R972, R975 R461, R475, R481, R495, R511 R521, R532, R535, R561, R571 R582, R585	RAB4C103J RAB4C220J RN1/16SE1202D RN1/16SE1202D RN1/16SE1202D	
	R464, R467, R484, R487, R514 R517, R524, R527, R564, R567 R574, R577 R462, R465, R482, R485, R512 R515, R522, R525, R562, R565	RN1/16SE1502D RN1/16SE1502D RN1/16SE1502D RN1/16SE2201D RN1/16SE2201D	
	R572, R575 R474, R476, R494, R496, R531 R533, R534, R536, R581 R583, R584, R586 R666, R667, R726-R728, R953	RN1/16SE2201D RN1/16SE3301D RN1/16SE3301D RN1/16SE3301D RS1/16S1201F	
	R655 R428 R952 R741, R751, R761 R668, R669, R954	RS1/16S1502F RS1/16S2201D RS1/16S3001F RS1/16S3300D RS1/16S3300F	
	R746, R748 R656 R672, R676, R680, R684, R688 R692 R747, R749	RS1/16S3301F RS1/16S4702F RS1/16S5600F RS1/16S5600F RS1/16S5601F	
	R801, R803, R805, R807, R809 R811, R821, R823, R827 R649-R654, R674, R678, R682 R427 R657	RS1/16S62R0D RS1/16S62R0D RS1/16S6800F RS1/16S6801D RS1/16S6801F	
	Other Resistors	RS1/16S□□□□	

## OTHERS

CN303	CONNECTOR 14P	14P-FJ
CN301	15P CONNECTOR	15P-1.25FJ
CN403	JACK	AKN1006
JA702	SOCKET	AKP7116
JA402	OPT. LINK OUT	GP1FA502TZ
PCB BINDER		VEF1040
JA701	JACK	VKB1123
JA502	JACK	VKB1125
JA501	JACK	VKB1129
JA703	JACK	VKB1151
JA401	JACK	VKB1160
CN703	7P CONNECTOR	VKN1267
CN304	19P CONNECTOR	VKN1775
CN302, CN601	B TO B CONNECTOR 40P SHIELDING PLATE	VKN1789 VNF1124

## C AVJB ASSY (VWV1877 : LBXJ)

## SEMICONDUCTORS

IC601	ADV7300KST
IC301	BA25BC01FP
IC921	BA25BC01FP
IC441, IC501, IC551	CS4392D-KS
IC902	K4S643232E-TC60



# DV-47A, DV-S733A, DV-747A

Mark	No.	Description	Part No.
△	IC701, IC702		LA7138M
	IC442, IC502, IC552		NJM5532MD
	IC422		NJM78M05FA
	IC331		PD0274A
	IC901		PM0033A
△	IC421		PQ15RW11
	IC333, IC351, IC371		TC74VHC157FT
	IC1503, IC361, IC362		TC7SH32FU
	IC1502		TC7SH86FU
	IC332, IC334, IC352, IC353		TC7SHU04FU
△	IC1505		TC7WH157FU
	IC1501		TC7WH74FU
	Q442, Q446, Q502, Q506, Q552		2SA1037K
	Q556, Q601–Q606, Q701–Q708		2SA1037K
	Q421		2SC1740S
	Q391		2SC2412K
	Q444, Q448–Q452, Q456, Q457		2SD2114K
	Q504, Q508, Q554, Q558		2SD2114K
	Q1001, Q1002, Q441, Q443, Q445		DTC114YK
	Q447, Q501, Q503, Q505, Q507		DTC114YK
	Q551, Q553, Q555, Q557		DTC114YK
	D411, D423		1SS355

## COILS AND FILTERS

L702, L704, L706	LAU100J
L701, L703, L705	LAU4R7J
L901	LCYA1R0J2520
F721-F723 12MHz LPF(VIDEO)	VTF1175
L1020, L1512 CHIP BEADS	VTL1084
L1531-L1533, L300 CHIP BEADS	VTL1084
L329, L368, L370 CHIP BEADS	VTL1084
L386, L441 CHIP BEADS	VTL1084
L473, L501, L551 CHIP BEADS	VTL1084
L821, L822, L831, L832 CHIP BEADS	VTL1089

## CAPACITORS

C463, C466, C483, C486, C513	CCSRCH101J50
C516, C523, C526, C563, C566	CCSRCH101J50
C573, C576	CCSRCH101J50
C462, C465, C482, C485, C512	CCSRCH102J50
C515, C522, C525, C562, C565	CCSRCH102J50
C572, C575	CCSRCH102J50
C719, C749, C759	CCSRCH150J50
C741, C751, C761	CCSRCH180J50
C720, C750, C760	CCSRCH270J50
C718, C748, C758	CCSRCH330J50
C412, C715, C716	CCSRCH470J50
C717, C747, C757	CCSRCH7R0D50
C631	CCSRCH821J25
C477, C497, C532, C533, C579	CCSRCH821J50
C581	CCSRCH821J50
C312, C339	CEAL101M6R3
C306, C310	CEAL470M16
C710, C714, C746	CEAT100M50
C431, C511, C514, C521, C524	CEAT101M16
C561, C564, C571, C574	CEAT101M16
C700, C701, C736, C738, C793	CEAT101M16
C397, C603, C725, C752, C787	CEAT101M6R3
C789, C796, C798, C910, C912	CEAT101M6R3
C914, C918, C921, C923, C951	CEAT101M6R3
C821, C831	CEAT102M6R3

Mark	No.	Description	Part No.
	C394		CEAT1R0M50
	C801, C802, C805, C806, C823		CEAT471M6R3
	C825, C833, C835		CEAT471M6R3
	C443, C503, C553		CEHAT1R0M50
	C445, C505, C555		CEHAT220M50
	C423, C427, C791, C795		CEHAZA101M16
	C429, C452, C507, C557		CEHAZA221M16
	C338, C356, C375, C601		CEHAZA221M6R3
	C517, C527, C567, C577		CEHAZA470M35
	C425, C442, C502, C552		CEHAZA471M6R3
	C705, C740		CEHAZL331M16
	C1055, C324-C326		CKSRYB103K50
	C1041-C1043, C1501, C712		CKSRYB104K16
	C733, C734, C809, C810		CKSRYB104K16
	C632		CKSRYB392K50
	C920		CKSRYF103Z50
	C1505, C333, C351, C371		CKSRYF104Z25
	C382, C383, C392, C396, C398		CKSRYF104Z25
	C411, C426, C444, C447, C504		CKSRYF104Z25
	C508, C554, C558, C602, C604		CKSRYF104Z25
	C608, C610, C611, C671-C673		CKSRYF104Z25
	C681-C683, C702-C704		CKSRYF104Z25
	C706-C709, C737, C739, C745		CKSRYF104Z25
	C788, C792, C794, C797, C857		CKSRYF104Z25
	C860, C862, C871, C922, C924		CKSRYF104Z25
	C1048, C1049, C1440, C1502-C1504		CKSRYF105Z10
	C1506, C1591, C2042, C301, C303		CKSRYF105Z10
	C305, C307, C320, C321		CKSRYF105Z10
	C331, C332, C334, C335		CKSRYF105Z10
	C352-C354, C372, C422, C424		CKSRYF105Z10
	C428, C441, C451, C475, C501		CKSRYF105Z10
	C506, C529, C551, C556, C582		CKSRYF105Z10
	C605-C607, C609, C612-C614		CKSRYF105Z10
	C619, C911, C913, C919		CKSRYF105Z10
	C925-C950, C952-C965		CKSRYF105Z10
	C309, C420, C421		CKSRYF224Z16
	C461, C464, C481, C484 (100μF)		VCH1192
	C467, C487 (47μF)		VCH1236

## RESISTORS

R961-R963	RAB4C103J
R971, R972, R975	RAB4C220J
R461, R475, R481, R495, R511	RN1/16SE1202D
R521, R532, R535, R561, R571	RN1/16SE1202D
R582, R585	RN1/16SE1202D
R464, R467, R484, R487, R514	RN1/16SE1502D
R517, R524, R527, R564, R567	RN1/16SE1502D
R574, R577	RN1/16SE1502D
R462, R465, R482, R485, R512	RN1/16SE2201D
R515, R522, R525, R562, R565	RN1/16SE2201D
R572, R575	RN1/16SE2201D
R474, R476, R494, R496, R531	RN1/16SE3301D
R533, R534, R536, R581	RN1/16SE3301D
R583, R584, R586	RN1/16SE3301D
R667	RS1/16S1001F
R726-R728, R953	RS1/16S1201F
R666	RS1/16S1501F
R428	RS1/16S2201D
R952	RS1/16S3001F
R741, R751, R761	RS1/16S3300D



Mark	No.	Description	Part No.
	R954		RS1/16S3300F
	R652-R654, R672, R676, R680		RS1/16S4700F
	R669, R684, R688, R692		RS1/16S5600F
	R801, R803, R805, R807, R809		RS1/16S62R0D
	R811, R821, R823, R827, R831		RS1/16S62R0D
	R833, R837		RS1/16S62R0D
	R649-R651, R674, R678, R682		RS1/16S6800F
	R427		RS1/16S6801D
	R655, R657		RS1/16S6801F
	Other Resistors		RS1/16S□□□J

## OTHERS

CN303	CONNECTOR 14P	14P-FJ
CN301	15P CONNECTOR	15P-1.25FJ
CN403	JACK	AKN1006
JA702	SOCKET	AKP7116
CN704	D-SOCKET(14P)	AKP7170
JA402	OPT. LINK OUT	GP1FA502TZ
	PCB BINDER	VEF1040
JA701	JACK	VKB1123
JA502	JACK	VKB1125
JA501	JACK	VKB1129
JA703	JACK	VKB1151
JA401	JACK	VKB1160
CN703	7P CONNECTOR	VKN1267
CN304	19P CONNECTOR	VKN1775
CN302, CN601	B TO B CONNECTOR 40P	VKN1789
	SHIELDING PLATE	VNF1124

## C AVJB ASSY (VWV1875 : WLXJ/NC, WLXJ/RD)

## SEMICONDUCTORS

△	IC601	ADV7300KST
	IC301	BA25BC0FP
	IC921	BA25BC0FP
	IC441, IC501, IC551	CS4392D-KS
	IC902	K4S643232E-TC60
△	IC701, IC702	LA7138M
	IC442, IC502, IC552	NJM5532MD
	IC422	NJM78M05FA
	IC331	PD0274A
	IC901	PM0033A
△	IC421	PQ15RW11
	IC333, IC351, IC371	TC74VHC157FT
	IC1503, IC361, IC362	TC7SH32FU
	IC1502	TC7SH86FU
	IC332, IC334, IC352, IC353	TC7SHU04FU
	IC1505	TC7WH157FU
	IC1501	TC7WH74FU
	Q442, Q446, Q502, Q506, Q552	2SA1037K
	Q556, Q601-Q606, Q701-Q708	2SA1037K
△	Q421	2SC1740S
	Q391	2SC2412K
	Q444, Q448-Q452, Q456, Q457	2SD2114K
	Q504, Q508, Q554, Q558	2SD2114K
	Q1001, Q1002, Q441, Q443, Q445	DTC114YK
	Q447, Q501, Q503, Q505, Q507	DTC114YK
	Q551, Q553, Q555, Q557	DTC114YK
	D411, D423	1SS355

Mark	No.	Description	Part No.
------	-----	-------------	----------

## COILS AND FILTERS

L702, L704, L706	LAU100J
L701, L703, L705	LAU4R7J
L901	LCYA1R0J2520
F721-F723 12MHz LPF(VIDEO)	VTF1175
L1020, L1512 CHIP BEADS	VTL1084
L1531-L1533, L300 CHIP BEADS	VTL1084
L329, L368, L370 CHIP BEADS	VTL1084
L386, L441 CHIP BEADS	VTL1084
L473, L501, L551 CHIP BEADS	VTL1084
L821, L822, L831, L832 CHIP BEADS	VTL1089

## CAPACITORS

C463, C466, C483, C486, C513	CCSRCH101J50
C516, C523, C526, C563, C566	CCSRCH101J50
C573, C576	CCSRCH101J50
C462, C465, C482, C485, C512	CCSRCH102J50
C515, C522, C525, C562, C565	CCSRCH102J50
C572, C575	CCSRCH102J50
C719, C749, C759	CCSRCH150J50
C741, C751, C761	CCSRCH180J50
C720, C750, C760	CCSRCH270J50
C718, C748, C758	CCSRCH330J50
C412, C715, C716	CCSRCH470J50
C717, C747, C757	CCSRCH7R0D50
C631	CCSRCH821J25
C477, C497, C532, C533, C579	CCSRCH821J50
C581	CCSRCH821J50
C312, C339	CEAL101 M6R3
C306, C310	CEAL470M16
C710, C714, C746	CEAT100M50
C431, C511, C514, C521, C524	CEAT101 M16
C561, C564, C571, C574	CEAT101 M16
C700, C701, C736, C738, C793	CEAT101 M16
C397, C603, C725, C752, C787	CEAT101 M6R3
C789, C796, C798, C910, C912	CEAT101 M6R3
C914, C918, C921, C923, C951	CEAT101 M6R3
C821, C831	CEAT102 M6R3
C394	CEAT10M50
C801, C802, C805, C806, C823	CEAT471 M6R3
C825, C833, C835	CEAT471 M6R3
C443, C503, C553	CEHAT10M50
C445, C505, C555	CEHAT120M50
C423, C427, C791, C795	CEHAZ101M16
C429, C452, C507, C557	CEHAZ221M16
C338, C356, C375, C601	CEHAZ221M6R3
C517, C527, C567, C577	CEHAZ470M35
C425, C442, C502, C552	CEHAZ471M6R3
C705, C740	CEHAZ1331M16
C1055, C324-C326	CKSRYH103K50
C1041-C1043, C1501, C712	CKSRYH104K16
C733, C734, C809, C810	CKSRYH104K16
C632	CKSRYH1392K50
C920	CKSRYH103Z50
C1505, C333, C351, C371	CKSRYH104Z25
C382, C383, C392, C396, C398	CKSRYH104Z25
C411, C426, C444, C447, C504	CKSRYH104Z25
C508, C554, C558, C602, C604	CKSRYH104Z25
C608, C610, C611, C671-C673	CKSRYH104Z25
C681-C683, C702-C704	CKSRYH104Z25
C706-C709, C737, C739, C745	CKSRYH104Z25
C788, C792, C794, C797, C857	CKSRYH104Z25
C860, C862, C871, C922, C924	CKSRYH104Z25



# DV-47A, DV-S733A, DV-747A

Mark	No.	Description	Part No.
	C1048, C1049, C1440, C1502-C1504	CKSRYF105Z10	
	C1506, C1591, C2042, C301, C303	CKSRYF105Z10	
	C305, C307, C320, C321	CKSRYF105Z10	
	C331, C332, C334, C335	CKSRYF105Z10	
	C352-C354, C372, C422, C424	CKSRYF105Z10	
	C428, C441, C451, C475, C501	CKSRYF105Z10	
	C506, C529, C551, C556, C582	CKSRYF105Z10	
	C605-C607, C609, C612-C614	CKSRYF105Z10	
	C619, C911, C913, C919	CKSRYF105Z10	
	C925-C950, C952-C965	CKSRYF105Z10	
	C309, C420, C421	CKSRYF224Z16	
	C461, C464, C481, C484 (100μF)	VCH1192	
	C467, C487 (47μF)	VCH1236	

## RESISTORS

R961-R963	RAB4C103J
R971, R972, R975	RAB4C220J
R461, R475, R481, R495, R511	RN1/16SE1202D
R521, R532, R535, R561, R571	RN1/16SE1202D
R582, R585	RN1/16SE1202D
R464, R467, R484, R487, R514	RN1/16SE1502D
R517, R524, R527, R564, R567	RN1/16SE1502D
R574, R577	RN1/16SE1502D
R462, R465, R482, R485, R512	RN1/16SE2201D
R515, R522, R525, R562, R565	RN1/16SE2201D
R572, R575	RN1/16SE2201D
R474, R476, R494, R496, R531	RN1/16SE3301D
R533, R534, R536, R581	RN1/16SE3301D
R583, R584, R586	RN1/16SE3301D
R667	RS1/16S1001F
R726-R728, R953	RS1/16S1201F
R666	RS1/16S1501F
R428	RS1/16S2201D
R952	RS1/16S3001F
R741, R751, R761	RS1/16S3300D
R954	RS1/16S3300F
R652-R654, R672, R676, R680	RS1/16S4700F
R669, R684, R688, R692	RS1/16S5600F
R801, R803, R805, R807, R809	RS1/16S62R0D
R811, R821, R823, R827, R831	RS1/16S62R0D
R833, R837	RS1/16S62R0D
R649-R651, R674, R678, R682	RS1/16S6800F
R427	RS1/16S6801D
R655, R657	RS1/16S6801F
Other Resistors	RS1/16S□□□J

## OTHERS

CN303 CONNECTOR 14P	14P-FJ
CN301 15P CONNECTOR	15P-1.25FJ
CN403 JACK	AKN1006
JA702 SOCKET	AKP7116
CN704 D-SOCKET(14P)	AKP7170
JA402 OPT. LINK OUT	GP1FA502TZ
PCB BINDER	VEF1040
JA701 JACK	VKB1123
JA502 JACK	VKB1125
JA501 JACK	VKB1129
JA703 JACK	VKB1151
JA401 JACK	VKB1160
CN703 7P CONNECTOR	VKN1267
CN304 19P CONNECTOR	VKN1775
CN302, CN601 B TO B CONNECTOR 40P	VKN1789

SHIELDING PLATE VNF1124

Mark	No.	Description	Part No.
------	-----	-------------	----------



AVJB ASSY (VWV1876 : WYXJ)

## SEMICONDUCTORS

△	IC601	ADV7300KST
	IC301	BA25BC0FP
	IC921	BA25BC0FP
	IC441, IC501, IC551	CS4392D-KS
	IC902	K4S643232E-TC60
	IC701, IC702	LA7138M
	IC708	MM1506XN
	IC710	MM1508XN
	IC706, IC707	MM1509XN
	IC442, IC502, IC552	NJM5532MD
△	IC422	NJM78M05FA
	IC331	PD0274A
	IC901	PM0033A
△	IC421	PQ15RW11
	IC333, IC351, IC371	TC74VHC157FT
	IC1503, IC361, IC362	TC7SH32FU
	IC1502	TC7SH86FU
	IC332, IC334, IC352, IC353	TC7SHU04FU
	IC1505	TC7WH157FU
	IC1501	TC7WH74FU
	Q442, Q446, Q502, Q506, Q552	2SA1037K
	Q556, Q601-Q606, Q701-Q708	2SA1037K
	Q768, Q771, Q774, Q981-Q983	2SA1037K
△	Q421	2SC1740S
	Q391	2SC2412K
	Q444, Q448-Q452, Q456, Q457	2SD2114K
	Q504, Q508, Q554, Q558	2SD2114K
	Q441, Q443, Q445, Q447, Q501	DTC114YK
	Q503, Q505, Q507, Q551, Q553	DTC114YK
	Q555, Q557	DTC114YK
	D411, D423, D721-D728	1SS355

## COILS AND FILTERS

L702, L704, L706	LAU100J
L701, L703, L705	LAU4R7J
L901	LCYA1R0J2520
F706-F708 6MHz LPF(VIDEO)	VTF1174
F721-F723 12MHz LPF(VIDEO)	VTF1175
L1020, L1512 CHIP BEADS	VTL1084
L1531-L1533, L300 CHIP BEADS	VTL1084
L329, L368, L370 CHIP BEADS	VTL1084
L386, L441 CHIP BEADS	VTL1084
L473, L501, L551 CHIP BEADS	VTL1084
L821, L822 CHIP BEADS	VTL1089

## CAPACITORS

C463, C466, C483, C486, C513	CCSRCH101J50
C516, C523, C526, C563, C566	CCSRCH101J50
C573, C576	CCSRCH101J50
C462, C465, C482, C485, C512	CCSRCH102J50
C515, C522, C525, C562, C565	CCSRCH102J50
C572, C575	CCSRCH102J50
C719, C749, C759	CCSRCH150J50
C741, C751, C761	CCSRCH180J50
C720, C750, C760	CCSRCH270J50
C718, C748, C758	CCSRCH330J50



Mark	No.	Description	Part No.
	C412, C715, C716 C717, C747, C757 C631 C477, C497, C532, C533, C579 C581	CCSRCH470J50 CCSRCH7R0D50 CCSRCH821J25 CCSRCH821J50 CCSRCH821J50	
	C312, C339 C306, C310 C710, C714, C722, C746, C753 C762 C431, C511, C514, C521, C524	CEAL101M6R3 CEAL470M16 CEAT100M50 CEAT100M50 CEAT101M16	
	C561, C564, C571, C574 C700, C701, C736, C738, C793 C397, C603, C725, C752, C787 C789, C796, C798, C910, C912 C914, C918, C921, C923, C951	CEAT101M16 CEAT101M16 CEAT101M6R3 CEAT101M6R3 CEAT101M6R3	
	C821 C394 C801, C802, C805, C806, C823 C825 C443, C503, C553	CEAT102M6R3 CEAT1R0M50 CEAT471M6R3 CEAT471M6R3 CEHAT1R0M50	
	C445, C505, C555 C423, C427, C791, C795 C429, C452, C507, C557 C338, C356, C375, C601 C517, C527, C567, C577	CEHAT220M50 CEHAZA101M16 CEHAZA221M16 CEHAZA221M6R3 CEHAZA470M35	
	C425, C442, C502, C552 C705, C740 C1055, C324-C326 C1041-C1043, C1501, C712, C721 C733, C734, C780, C781	CEHAZA471M6R3 CEHAZL331M16 CKSRYB103K50 CKSRYB104K16 CKSRYB104K16	
	C809, C810 C632 C920 C1505, C333, C351, C371 C382, C383, C392, C396, C398	CKSRYB104K16 CKSRYB392K50 CKSRYF103Z50 CKSRYF104Z25 CKSRYF104Z25	
	C411, C426, C444, C447, C504 C508, C554, C558, C602, C604 C608, C610, C611, C671-C673 C681-C683, C702-C704 C706-C709, C723, C737, C739	CKSRYF104Z25 CKSRYF104Z25 CKSRYF104Z25 CKSRYF104Z25 CKSRYF104Z25	
	C745, C754, C763, C768, C771 C774, C788, C790, C792, C794 C797, C851, C852, C857, C860 C862, C871, C922, C924 C981-C983	CKSRYF104Z25 CKSRYF104Z25 CKSRYF104Z25 CKSRYF104Z25 CKSRYF104Z25	
	C1048, C1049, C1440, C1502-C1504 C1506, C1591, C2042, C301, C303 C305, C307, C320, C321 C331, C332, C334, C335 C352-C354, C372, C422, C424	CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10	
	C428, C441, C451, C475, C501 C506, C529, C551, C556, C582 C605-C607, C609, C612-C614 C619, C911, C913, C919 C925-C950, C952-C965	CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10 CKSRYF105Z10	
	C309, C420, C421 C461, C464, C481, C484 (100μF) C467, C487 (47μF)	CKSRYF224Z16 VCH1192 VCH1236	

Mark	No.	Description	Part No.
<b>RESISTORS</b>			
	R961-R963 R971, R972, R975 R461, R475, R481, R495, R511 R521, R532, R535, R561, R571 R582, R585	RAB4C103J RAB4C220J RN1/16SE1202D RN1/16SE1202D RN1/16SE1202D	
	R464, R467, R484, R487, R514 R517, R524, R527, R564, R567 R574, R577 R462, R465, R482, R485, R512 R515, R522, R525, R562, R565	RN1/16SE1502D RN1/16SE1502D RN1/16SE1502D RN1/16SE2201D RN1/16SE2201D	
	R572, R575 R474, R476, R494, R496, R531 R533, R534, R536, R581 R583, R584, R586 R668	RN1/16SE2201D RN1/16SE3301D RN1/16SE3301D RN1/16SE3301D RS1/16S1000F	
	R667 R726-R728 R666 R428 R953	RS1/16S1001F RS1/16S1201F RS1/16S1501F RS1/16S2201D RS1/16S2201F	
	R719, R736, R738 R741, R751, R761 R954 R746, R748 R982, R986, R990	RS1/16S3000D RS1/16S3300D RS1/16S3300F RS1/16S3301F RS1/16S3900F	
	R952 R669, R672, R676, R680, R684 R688, R692 R747, R749 R801, R803, R805, R807, R809	RS1/16S5101F RS1/16S5600F RS1/16S5600F RS1/16S5601F RS1/16S62R0D	
	R811, R821, R823, R827 R649-R654, R674, R678, R682 R427 R655, R657 R949-R951	RS1/16S62R0D RS1/16S6800F RS1/16S6801D RS1/16S6801F RS1/16S68R0F	
	Other Resistors	RS1/16S□□□□	
<b>OTHERS</b>			
	CN303 CONNECTOR 14P CN301 15P CONNECTOR CN403 JACK JA702 SOCKET JA402 OPT. LINK OUT	14P-FJ 15P-1.25FJ AKN1008 AKP7118 GP1FA502TZ	
	PCB BINDER JA701 JACK JA502 JACK JA501 JACK JA703 JACK	VEF1040 VKB1123 VKB1125 VKB1129 VKB1151	
	JA401 JACK CN702 16P CONNECTOR CN703 7P CONNECTOR CN304 19P CONNECTOR CN302, CN601 B TO B CONNECTOR 40P	VKB1160 VKN1247 VKN1267 VKN1775 VKN1789	
	SHIELDING PLATE	VNF1124	



# DV-47A, DV-S733A, DV-747A

Mark	No.	Description	Part No.
------	-----	-------------	----------

## **D** SCRB ASSY (WYXJ ONLY)

### SEMICONDUCTORS

Q212	2SA1037K
Q211, Q311-Q313, Q401, Q403	2SC2412K
D301, D401	1SS355

### SWITCHES AND RELAYS

RY101, RY102, RY201	VSR1016
RY203, RY301	VSR1016

### CAPACITORS

C103-C110	CCSRCH391J50
C221, C241, C251, C315	CEAT101M10
C321, C331	CEAT471M10
C101, C102, C11, C201, C203	CKSRYF104Z25
C21, C212, C215, C301	CKSRYF104Z25
C311, C312, C314, C402, C403	CKSRYF104Z25
C94	CKSRYF104Z25

### RESISTORS

R215, R223, R242, R252, R321	RS1/16S68R0F
R331	RS1/16S68R0F
Other Resistors	RS1/16S□□□J

### OTHERS

JA101, JA102 CONNECTOR	VKB1157
CN101 16P CONNECTOR	VKN1247
PRINTED CIRCUIT BOARD	VNP1838

## **E** FLIR ASSY

### SEMICONDUCTORS

IC101	PE5251A
IC103	PST3242
IC111	TSOP1840XG1

### COILS AND FILTERS

L101	LAU680J
------	---------

### CAPACITORS

C111, C112, C121, C122	CCSRCH102J50
C132	CEAL101M6R3
C105, C142, C152	CEAL470M16
C102, C103	CKSRYF104Z25
C107	CKSRYF104Z50

C101, C104, C106, C108	CKSRYF105Z10
C131, C141	CKSRYF105Z10
C143, C151	CKSRYF224Z16

### RESISTORS

All Resistors	RS1/16S□□□J
---------------	-------------

### OTHERS

CN103 CONNECTOR 4P	04R-FJ
CN102 CONNECTOR 7P	07R-FJ
CN101 15P CONNECTOR	15R-1.25FJ
V101 FL TUBE	VAW1065
FL HOLDER	VNK4748
X101 (5MHz)	VSS1142

Mark	No.	Description	Part No.
------	-----	-------------	----------

## **F** PWSB ASSY

### SEMICONDUCTORS

D202	SLR-56VC(NPQ)
------	---------------

### SWITCHES AND RELAYS

S201, S202	ASG7013
------------	---------

### RESISTORS

All Resistors	RS1/16S&&&J
---------------	-------------

### OTHERS

CN201 CONNECTOR 7P	07P-FJ
--------------------	--------

## **G** KEYB ASSY

### SWITCHES AND RELAYS

S251-S256	ASG7013
-----------	---------

### RESISTORS

All Resistors	RS1/16S□□□J
---------------	-------------

### OTHERS

CN251 CONNECTOR 4P	04P-FJ
--------------------	--------

## **H** POWER SUPPLY UNIT

### OTHERS

△ P101 PROTECTOR(1.6A)	AEK7066
△ F001 FUSE 1.25A	REK1099

## **I** DILB ASSY (Except KUXJ/CA)

### SEMICONDUCTORS

D291	NSPB500-0008
D292	UDZS6.2B

### CAPACITORS

C291	CKSRYF105Z10
------	--------------

### RESISTORS

All Resistors	RS1/16S□□□J
---------------	-------------

### OTHERS

CN291 CONNECTOR POST	B2B-PH-K
----------------------	----------



Mark	No.	Description	Part No.
<b>J</b>		<b>SACD ASSY</b>	
<b>SEMICONDUCTORS</b>			
△	IC903		BA25BC0FP
	IC801		CXD2753R
	IC802		HY57V161610DTC-8
	IC804		TC74VHC74FT
	IC803		TC7SH08FU
<b>COILS AND FILTERS</b>			
	L801-L805, L807	CHIP BEADS	VTL1082
<b>CAPACITORS</b>			
	C847, C882, C895		CCSRCH100D50
	C837, C838, C871, C893, C954		CEHAZA101M16
	C831, C833, C835, C951		CEHAZA221M6R3
	C815, C816		CKSRYB103K50
	C801, C804-C814, C817, C818		CKSRYF105Z10
	C820, C821, C832, C834		CKSRYF105Z10
	C872-C878, C881, C891		CKSRYF105Z10
	C952, C953, C955, C956		CKSRYF105Z10
<b>RESISTORS</b>			
	R871, R872		RAB4C103J
	Other Resistors		RS1/16S□□□J
<b>OTHERS</b>			
	CN901	19P CONNECTOR	19R-1.25FJ
		PCB BINDER	VEF1040
	CN801	FFC CONNECTOR	VKN1794



## 6. ADJUSTMENT

### 6.1 ADJUSTMENT ITEMS AND LOCATION

#### ■ Adjustment Items

[Mechanism Part]

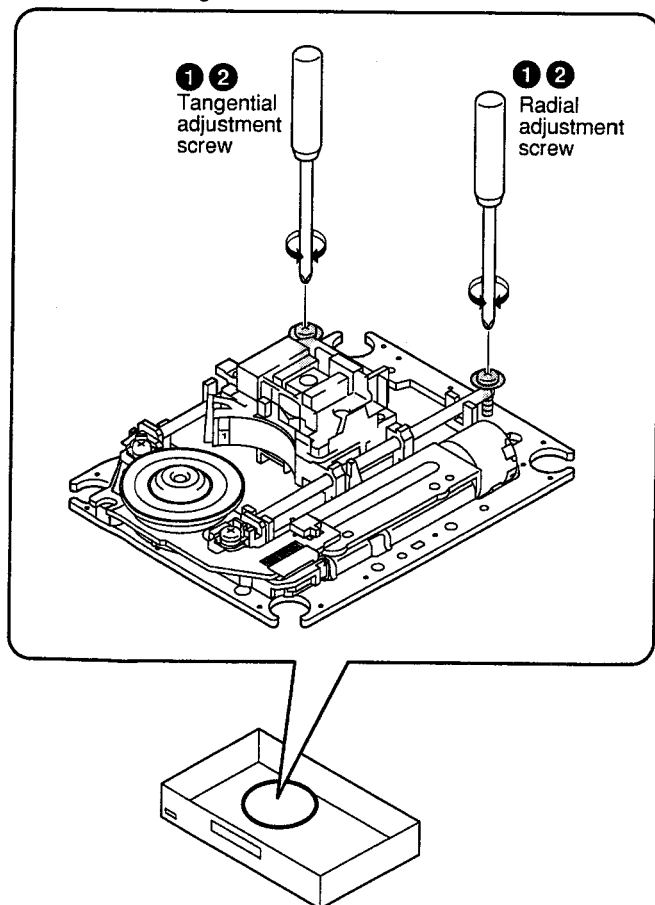
- ❶ Tangential and Radial Height Coarse Adjustment
- ❷ DVD Jitter Adjustment
- ❸ Initialize the Focus Sweep Setting

[Electrical Part]



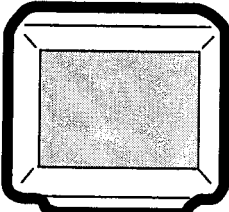
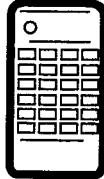
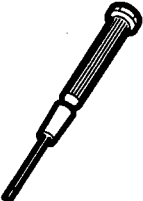

Electrical adjustments are not required.

#### ■ Adjustment Points (Mechanism Part)

**Cautions:** After adjustment, adjustment screw locks with the Screw tight.



### 6.2 JIGS AND MEASURING INSTRUMENTS

	
⊕ Screwdriver (large)	⊕ Screwdriver (medium)
	
TV monitor	Test mode remote control unit (GGF1067)
	
⊕ Precise screwdriver	DVD test disc (GGV1025)
Screw tight (GYL1001)	



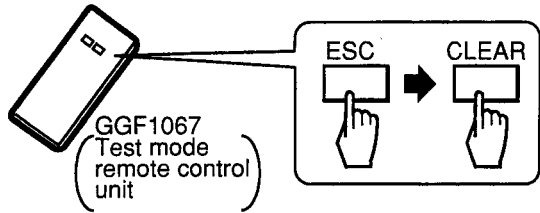
6.3 NECESSARY ADJUSTMENT POINTS

When	Adjustment Points
■ Exchange Parts of Mechanism Assy	
Exchange the Pickup	<div>Mechanical point1, 2, 3* After adjustment, screw locks with the Screw tight.</div> <div>Electric point</div>
Exchange the Traverse Mechanism	<div>Mechanical point3</div> <div>Electric point</div>
Exchange the Spindle Motor	<div>Mechanical point2, 3* After adjustment, screw locks with the Screw tight.</div> <div>Electric point</div>
■ Exchange PCB Assy	
Exchange PC Board LOAB, DVDM ASSY	<div>Mechanical point</div> <div>Electric point</div>

\*

**Purpose:** To set the sweep which was correct with the individual Traverse mechanism.

Be sure to perform the following step finally when replaced Pickup, Traverse Mechanism and Spindle Motor.

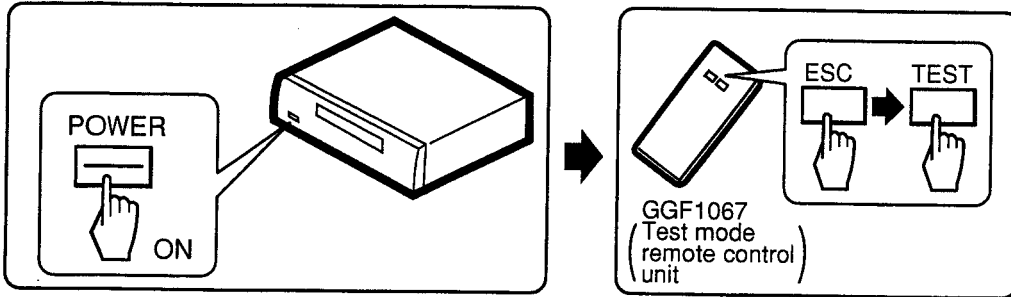


(It is necessary when performed adjustment procedure ②.)



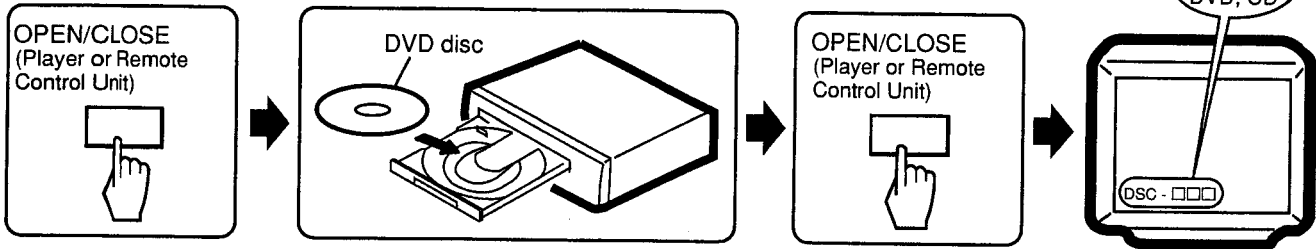
### 6.4 TEST MODE

#### TEST MODE: ON



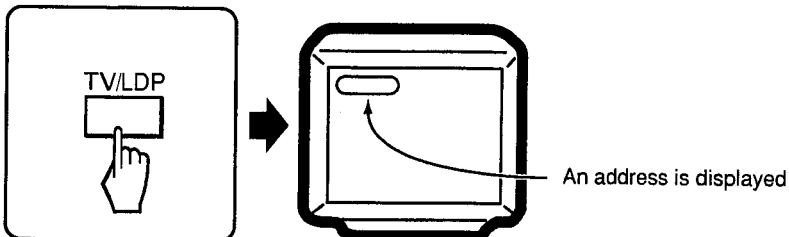
#### TEST MODE: DISC SET

##### <TRAY OPEN>



#### TEST MODE: PLAY

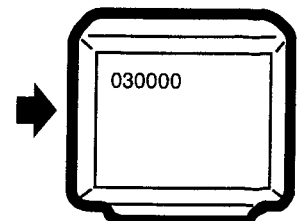
##### <PLAY>



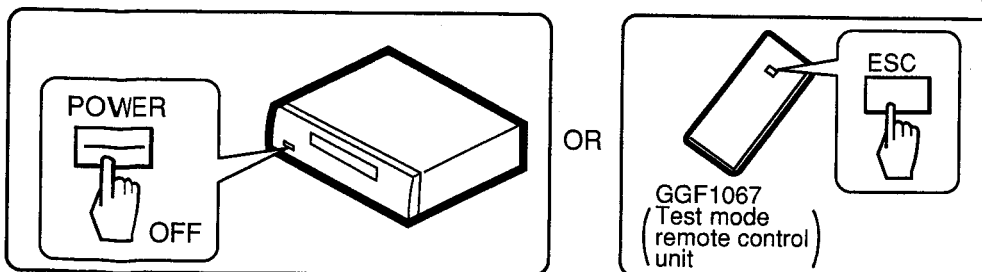
##### < When playback with the target address of disc (DVD)>

For example, when playback with # 30000

During PLAY **+10** → **3** → **0** → **0** → **0** → **0** → **CHP/TIM** Press keys in order



#### TEST MODE: OFF



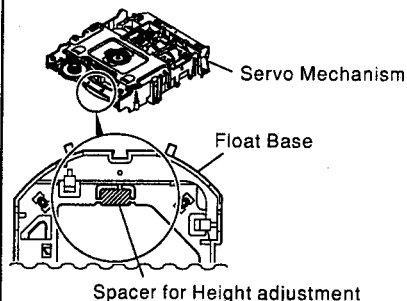


## 6.5 MECHANISM ADJUSTMENT

### 1 Tangential and Radial Height Coarse Adjustment

#### START

- Remove the servo mechanism.
- Remove a Spacer for height adjustment attached to the back side (shaded area) of the Servo Mechanism (Float Base) with nippers.



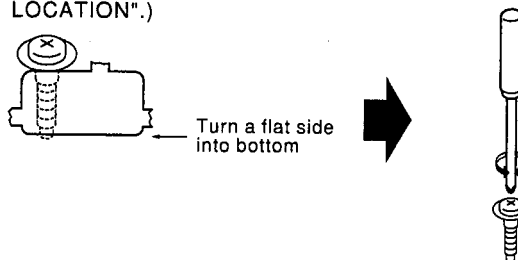
**Note:**  
Turn the Short switch to Short side when removing the Pickup Flexible Cable.  
(Refer to "7.1.7 DISASSEMBLY".)

#### Cautions:

Because there is not a Spacer for height adjustment in adjustment after the second time, will keep it at need.  
(This parts is Traverse mechanism exclusive use of a model for 2001 years)



Put a spacer between a Tangential (or Radial) adjustment screw and Mechanism Base and turn each screw to adjust the height. (Refer to "6.1 ADJUSTMENT ITEMS AND LOCATION".)





## 2 DVD Jitter Adjustment

- Playback method of inner and outer address for the purpose is referred to "6.4 TEST MODE".
- Jitter indication of the monitor is referred to "7.1.4 TEST MODE SCREEN DISPLAY".

Use disc: GGV1025

### START

- Test mode
- Play the DVD test disc at outer track (around #200000)

Mechanism Assy

Adjust the Tangential Adjustment Screw so that jitter becomes minimum.

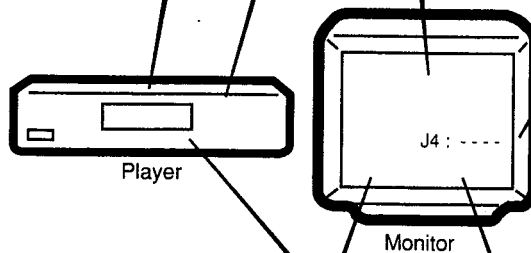
J4 : Min

- Play the DVD test disc at inner track (around #30000)

Mechanism Assy

Adjust the Radial Adjustment Screw so that jitter becomes minimum.

J4 : Min



- Play the DVD test disc at outer track (around #200000)

Mechanism Assy

Readjust the Tangential Adjustment Screw so that jitter becomes minimum.

J4 : Min

### CHECK

Confirm the error rate that is displayed "OK"

(Example ER (av): 2.5e - 5- \*OK )

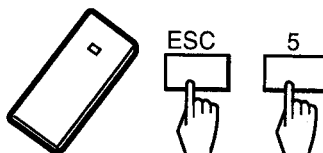
Turn the POWER OFF in case of NG once, and perform the adjustment once again.

If error rate is OK, locks a root of tangential and radial adjustment screws with the Screw tight, and go to step ③.

Screw tight: GYL1001

Disc playback normally.

- The measurement of block error rate

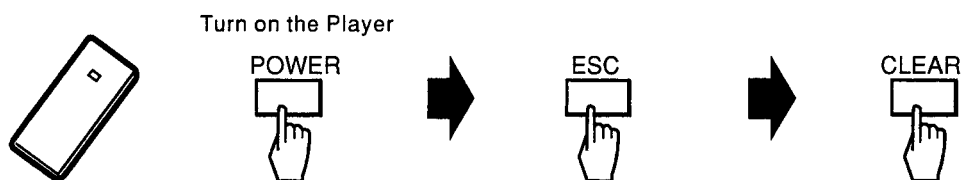


Test mode end



### 3 Initialize the Focus Sweep Setting

**Purpose:** To set the sweep which was correct with the individual Traverse mechanism.



**Note:** Be sure to perform this step when replaced the Pickup or Traverse mechanism.



## 7. GENERAL INFORMATION

### 7.1 DIAGNOSIS

#### 7.1.1 ID NUMBER AND ID DATA SETTING

##### ■ Entering the ID Number and ID Data for Players with DVD-Audio Compatibility

It is necessary with a player with DVD-audio compatibility to set an individual number (ID number) and ID data. If the number and data are not set correctly with the following procedure, operations in the future may not be guaranteed. You will find the ID number to be set on the yellow label on the rear panel.

**Important:** If no yellow label is found on the rear panel, write down the specified ID number by checking it according to "How to confirm the ID number" shown below.

##### ■ The Input is Necessary When:

- Downloading FLASH-ROM is finished. (The latest version must be downloaded when a repair is made.)
- "No ID Number" is displayed on the screen or FL display immediately after the power is turned on or in Stop mode.
- If "No ID DATA" is displayed, the ID data must be entered.

##### Note:

Be sure to enter the ID number in Stop mode.

Use the service remote control (GGF1067) for operations. Only opening/closing of the tray are performed from the player.

##### ■ How to Input the ID Number and ID Data

- ① To enter the input mode, press **[ESC]** + **[STEREO]** in a status with no ID number set, such as after FLASH-ROM downloading.



- ② As number input is enabled when the unit enters the input mode, input the 9-digit ID number.  
(The entered number is also displayed on the FL display.)

[Player's ID Number Setting]

ID Number ?

② → > -----

<CLEAR> Exit

Input ID Number !



- ③ After inputting the number, press **[SEARCH]** to register the ID number.

[Player's ID Number Setting]

ID Number ?

> 0 0 0 0 0 0 0 0 1 OK ?

<PLAY> Compare Mode

③ → <SEARCH> Enter

Input ID Number !



- ④ When the ID number has been registered, the unit enters the ID data input mode. (The FL display indicates "NO ID DATA.") In this condition, place the ID data disc on the tray and close the tray using the CLOSE key **[■/▲]** on the player.

[Player's ID Data Setting]

<CLEAR> Exit

④ → Insert The ID Data Disc !



- ⑤ While the data are being read, the message shown in the figure at left is displayed on the screen.  
(The FL display indicates "RD ID DATA.")

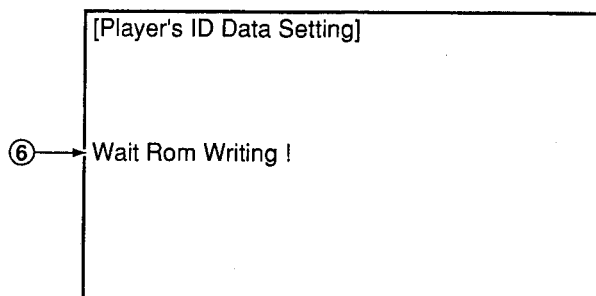
[Player's ID Data Setting]

⑤ → Loading The ID Data Disc !



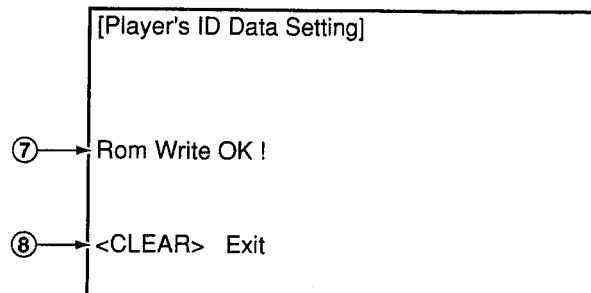


- ⑥ When the ID data have been read, the data are written to the FLASH-ROM.  
(The FL display indicates "WR ID DATA.")



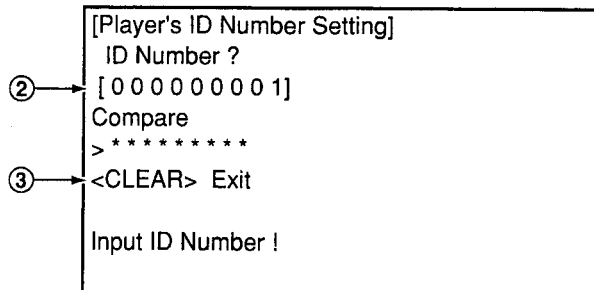
- ⑦ When the ID data have been written to the FLASH-ROM, the message "Rom Write OK" is displayed on the screen.  
(The FL display indicates "ID DATA OK.")

- ⑧ After confirming this message, press **CLEAR** to exit the input mode.



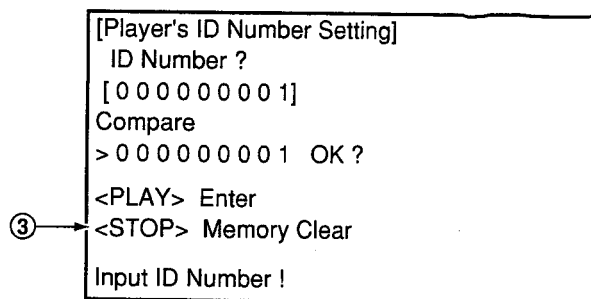
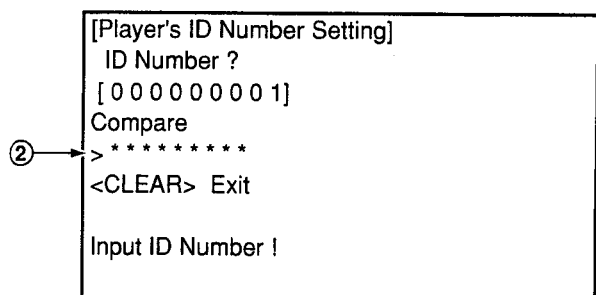
## How to Confirm the ID Number

- ① Press **ESC**+**STEREO** with an ID number set, and the unit enters the ID number confirmation mode.
- ② The set ID number is displayed on the screen (and on the FL display), permitting you to confirm it.
- ③ To exit this mode, press **CLEAR**.



## How to Clear the ID Number

- ① Press **ESC**+**STEREO** with an ID number set, and the unit enters the ID number confirmation mode.
- ② Input the same number as the ID number you have set.
- ③ After inputting the number, press **STOP**.  
Only when the entered number matches the set ID number, the ID number is cleared and the unit exits this mode.  
If the numbers do not match, you must return to step 2.  
(**STOP** is not accepted until 9 digits are entered.)





7.1.2 SELF-DIAGNOSTIC FUNCTION OF PICKUP DEFECTIVE

This unit can confirm the laser diode current value (DVD: 650nm, CD: 780nm) of pickup on the Test Mode screen.  
(Press the **ESC** → **TEST** keys in order on the test mode remote control unit (GGF1067) to enter the test mode.)

It's effective in case of the following condition.

Symptom

- Indicates "No Disc" in FL display.
- Player does not playback, etc..

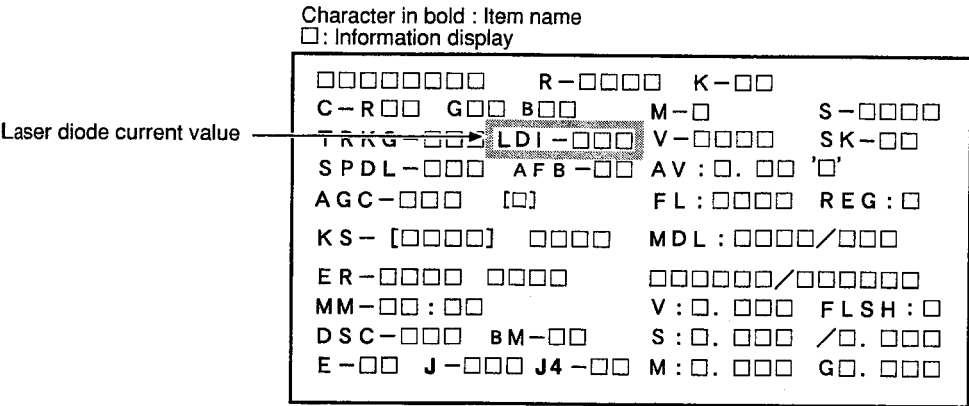
Procedure of Self-Diagnosis

- ① Enter the Test mode.
- ② When diagnosing the 650nm laser diode:  
Press the **TEST** → **1** keys in order, and turn on the laser diode (It light-up for nine seconds.).  
When diagnosing the 780nm laser diode:  
Press the **TEST** → **4** keys in order, and turn on the laser diode (It light-up for nine seconds.).

When let it turn on once again after performed ② once,  
After pressed **REP.B** key once  
650nm: Press the **TEST** → **1** keys in order  
780nm: Press the **TEST** → **4** keys in order

- ③ Confirm the indicated value of the laser diode current (LDI). (Refer to following figure.)
- ④ **When indicated value is more than 100, pickup is defective. → Replacement is necessary**  
Replace the Traverse Mechanism Assy or Pickup.

**Note :** When a DVD disc or a CD disc is played in the test mode, this function is effective.



Test Mode Screen Display

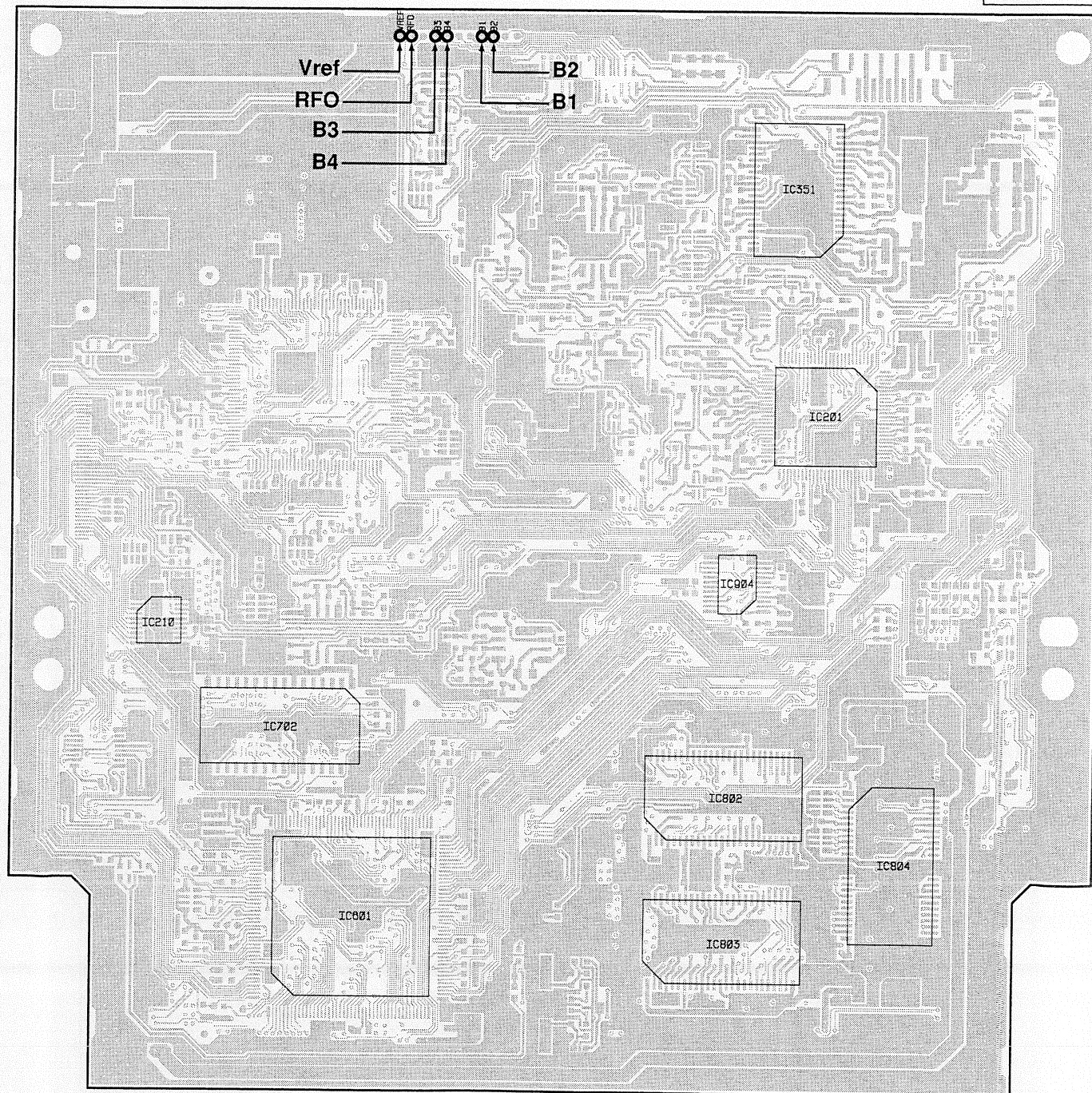


### 7.1.3 TEST POINTS LOCATION

This model has not test terminal.

Please use following points on the DVDM Assy when checking RF, FE and TE, etc..

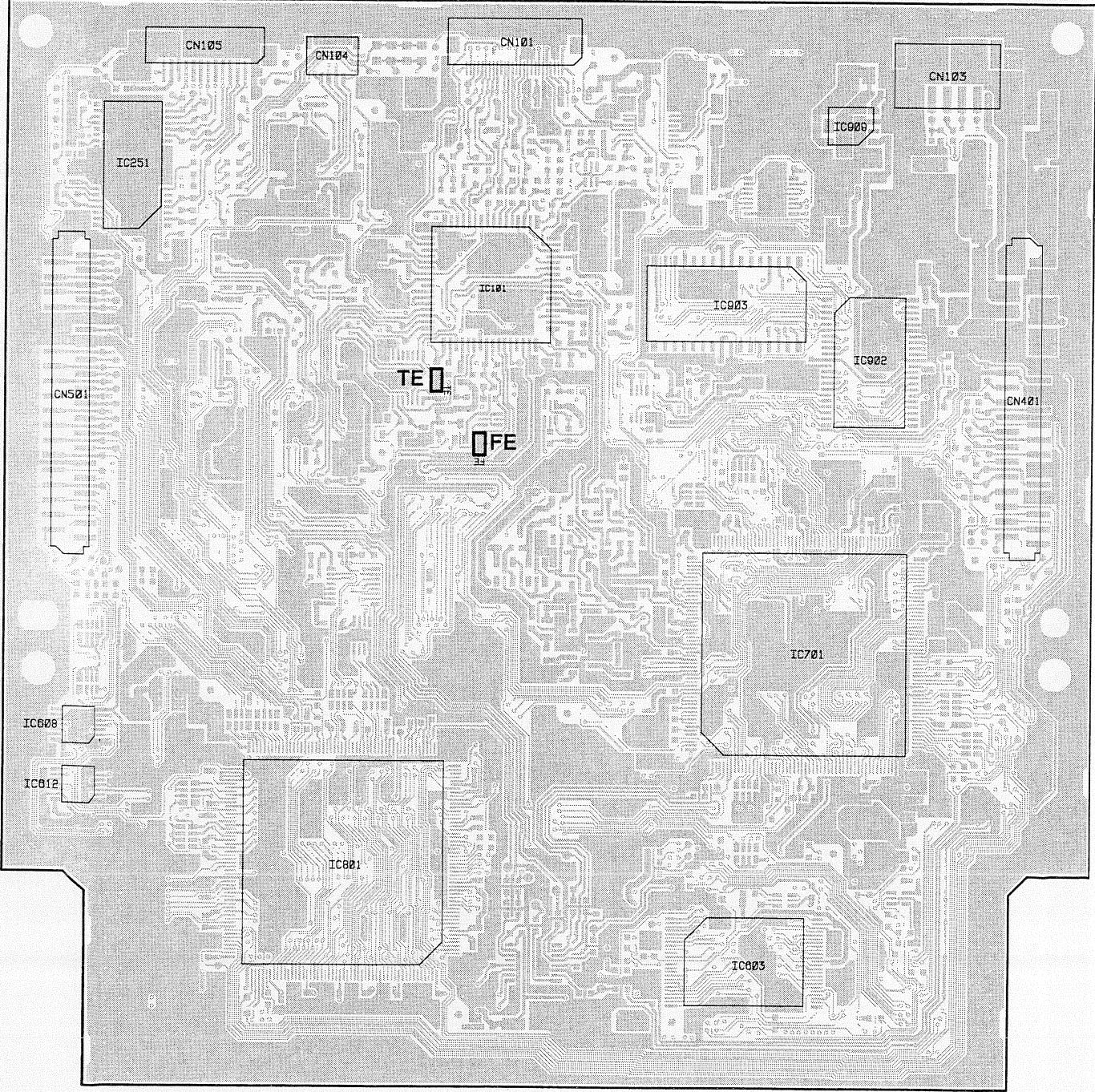
## B DVDM ASSY

**SIDE A**




**SIDE B**

**B** DVDM ASSY





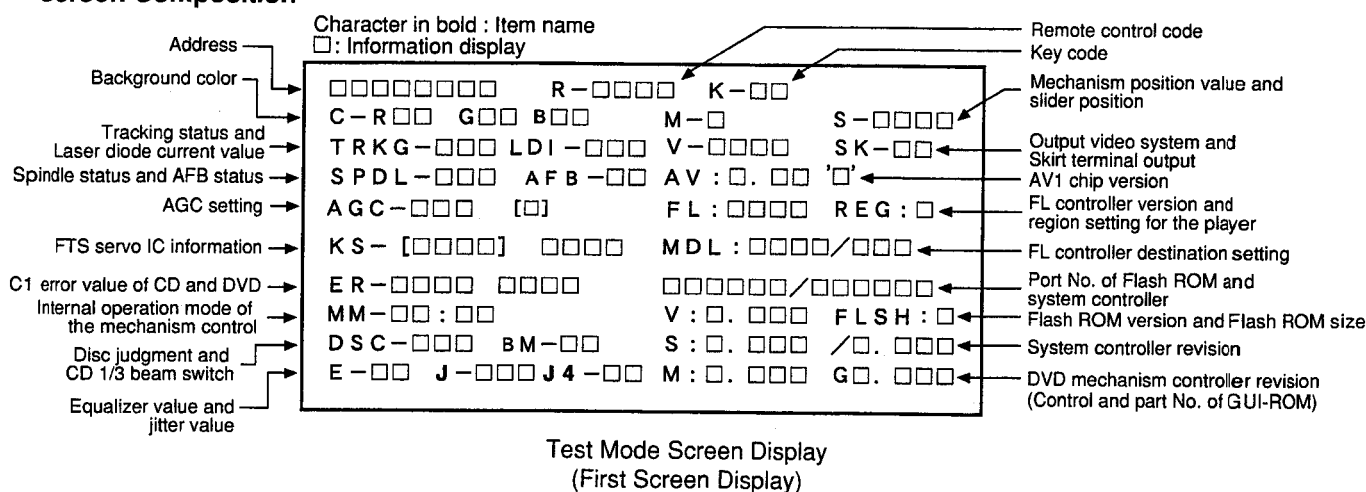
## 7.1.4 TEST MODE SCREEN DISPLAY

### ■ TEST MODE SCREEN DISPLAY

When the test mode is entered, press the **[ESC]** button and the **[TEST]** button in order of the test mode remote control unit (GGF1067).

Consecutive double-OSD display is supported during test mode. The screen is composed 10 lines with a maximum of 32 characters per line. It can't be used with the debugging display mode together.

#### • Screen Composition



#### Caution :

The first screen and second screen switch by pressing [DISPLAY] key of the remote control unit.  
It is only a version display part on the lower right of the screen those contents of display change.  
ATB : ON/OFF information display and AGC manual setting display deleted with the second generation.  
The displays of Tilt error value, Tilt servo status and pickup DVD/CLD display deleted with the third generation becomes LD part is deleted.

#### • Description of Each Item on the Display

##### (1) Address indication

The address being traced is displayed in number.  
DVD : ID indication (hexadecimal number, 8 digits) [ \* \* \* \* \* \* \* \* ]  
CD : A-TIME (min. sec.) [ 0 0 0 0 \* \* \* \* ]  
(Note : For DVDs, decimal-number indication is possible.)

##### (2) Code indication of the remote control unit [R - \* \* \* \*]

The code for the key pressed on the remote control unit, which is received by the FL controller, is displayed while the key is pressed. In the case of the double code, the second code will be displayed.

##### (3) Key code indication for the main unit [K - \* \*]

The code for the key pressed on the main unit, which is received by the system controller, is displayed while the key is pressed.

##### (4) Background color indication [C - R \* \* G \* \* B \* \*]

##### (5) ① Tracking status [TRKG - \* \* \*]

Tracking on [ON]  
Tracking off [OFF]

##### ② Laser diode current value [LDI - \* \* \*]

##### (6) ① Spindle status [SPDL - \* \* \*]

Spindle accelerator and brake, free-running [A/B]  
FG servo [FG]  
Rough, velocity phase servo [SRV]  
Offset addition, rough, velocity phase servo [O\_S]

##### ② AFB status [AFB - \* \*]

ON [ON]  
OFF [OFF]

##### (7) Mechanism position value [M - \*]

Position code [1] to [3]

##### (8) Slider position [S - \* \* \* \*]

CD TOC area [IN]  
CD active area [CD]

##### (9) AGC setting [AGC - \* \*]

AGC on [AGC-ON]  
AGC off [AGC-OFF]



# DV-47A, DV-S733A, DV-747A

## (10) Output video system [V - \* \* \* \*]

NTSC system	[NTSC]
PAL system	[PAL ]
Auto-setting	[AUTO]

### Skirt terminal output [SK - \* \*]

VIDEO	[00]
S-VIDEO	[01]
RGB	[02]

Note : Display only the model which can do the output setting of skirt terminal.

## (11) FTS servo IC information

DSP coefficient indication [KS - [ \* \* \* \* ] \* \* \* \*]

Displays the address (four digits) of the specified coefficient and the setting value (four digits) with [TEST] and [9] keys.

## (12) Error rate indication

① C1 error value of CD	[ER - C1 * * * *]
② C1 error value of DVD	[ER - * * * * * * * *]

## (13) Internal operation mode of mechanism controller

[MM - \* \* : \* \*]

Internal mechanism mode (2 digits) and internal mechanism step (2 digits) of the mechanism controller

## (14) ① Disk sensing [DSC - \* \* \*]

The type of discs loaded is displayed.

[DVD], [CD ], [VCD], [ ]

② CD 1/3 beam switch [BM - \* \*]

## (15) ① Equalizer value [E - \* \*]

② Jitter value [J - \* \*]

Make the jitter four times, and renew it in every 0.5 second. [J4 - \* \*]

CD is effective only in the jitter value.

## (16) Version of the AV-1 chip [ AV : \* . \* \* ' \* ' ]

## (17) ① Version of the FL controller [FL : \* \* \* \*]

② Region setting of the player [REG : \*]

Setting value [1] to [6]

## (18) Destination setting of the FL controller

[MDL : \* \* \* \* / \* \* \* \*]

Four characters in the front represent the type of model : three characters in the back represent the destination code.

J : /J, K : /KU, /KC, /KU/KC, R : /RAM, /RL, /RD, /LB,

WY : /WY

## (19) The part number of the flash ROM and system controller [ \* \* \* \* \* / \* \* \* \* \* ]

① Part number of the flash ROM <Front>

(Example) VYW1536-A = W1536A

(Example) PD6256A9 = 6256A9

② Part number of the system controller <Back>

(Example) PD3381T1 = 3381T1

## (20) ① Version of the flash ROM [V : \* . \* \* \*]

② Flash ROM size [FLSH = \*]

## (21) Revision of the system controller [S : \* . \* \* \* / \* . \* \*]

① Revision number of the external ROM part (flash ROM) of the system controller <Front>

② Revision of the internal ROM part of the system controller <Back>

## (22) Revision of the DVD mechanism controller

[M : \* . \* \* \*]

Revision number of the external ROM part (flash ROM) of the DVD mechanism controller

## (23) Control and part numbers of the GUI-ROM

[GUI : \* \* \* \*]

No GUI model displays as " — / — ".

OEM model displays the part number of GUI-ROM

[GUI : \* \* \* \*]



## ■ DEBUGGING SCREEN SPECIFICATION FOR THE MECHANISM CONTROLLER

- This specifications is subject to change without notice.

### ① Indication Method of The Mechanism Controller Debugging Screen

A debugging screen of the mechanism controller is indicated when pressing the test mode remote control unit [GGF1067] in order of the **[ESC]** and **[CHP/TM]** buttons.

Release from debugging screen display of the mechanism controller with the **[ESC]** button.

### ② Screen Layout

E R	1	>	2				3		4	
M	5	5	5	5	5	5	5	5	5	5
S	6	6	6	6	6	6	6	6	6	6
	7		8	cm	22	r p m	SGC :	10	-	11 - 12
	13		14		15		J -	16	0 -	17 1 - 18
M	19	19	19	19	19	19	19	19	19	19
S	20	20	20	20	20	20	20	20	20	20
S :	21		OEIC :	9		23	BM -	24		
F	25 -	26	I	27	T	28 -	29 S	30 -	31	R 32 C 33
	34		-						35	

### ③ Indication Contents

- The error that became the trigger that an error of 2 occurred.  
There are many cases same as 2.
- The error number that transferred to the system controller  
Refer to the error list about contents of error number.
- Code read in state (it does not support in this unit)  
When X is indicated, ID or subcode are not able to read in.  
When X is not indicated, they are able to read in.
- ID or subcode (it does not support in this unit)  
Subcode indicates the A time.
- Inside mode of the mechanism controller when an error of 1 occurred  
It can indicate to a maximum 10 mode. Indicate it in order of an old mode from the left, and go right, and become a new mode. Indicate only a nest share of the mode.
- Processing step of inside mode of 5  
It can grasp the mode reaching an error and transition of step by watching 5 and 6 and it can specify the occurrence place of most errors.
- Disk information in the mechanism controller  
? : Indistinctness  
NO : There is no disc  
DVD 1 : DVD single layer  
DVD 2 : DVD dual layer  
CD : CD  
CDR : CD-R or CD-RW  
CDR P : PRD of CD-R or CD-RW
- As a result of 8cm /12cm distinction  
? : Indistinctness (undistinction)  
8 : 8 cm  
12 : 12 cm
- OEIC gain (it does not support in this unit)  
H : OEIC HIGH gain  
L : OEIC LOW gain
- SGC gain for LD of 780nm  
It indicates a step using in the mechanism controller inside with a hexadecimal number.  
Set the gain so that S curve becomes 1.8V (p-p) in disc distinction.
- SGC gain for LD of 650nm For L0.  
It indicates a step using in the mechanism controller inside with a hexadecimal number. Set a gain so that S curve becomes 1.8V (p-p) in disc distinction.
- SGC gain for LD of 650nm For L1.  
It indicates a step using in the mechanism controller inside with a hexadecimal number. Set a gain so that a S curve becomes 1.8V (p-p) in disc distinction.
- RF count value for disc distinction  
RF count value to use the disc distinction. It compares threshold value of 14 and 15 and distinguishes the disc.
- Disc distinction threshold value (DVD and CD)  
Threshold value of the disc distinction. Distinguish it from DVD if bigger than this value, and distinguish it from CD if small.



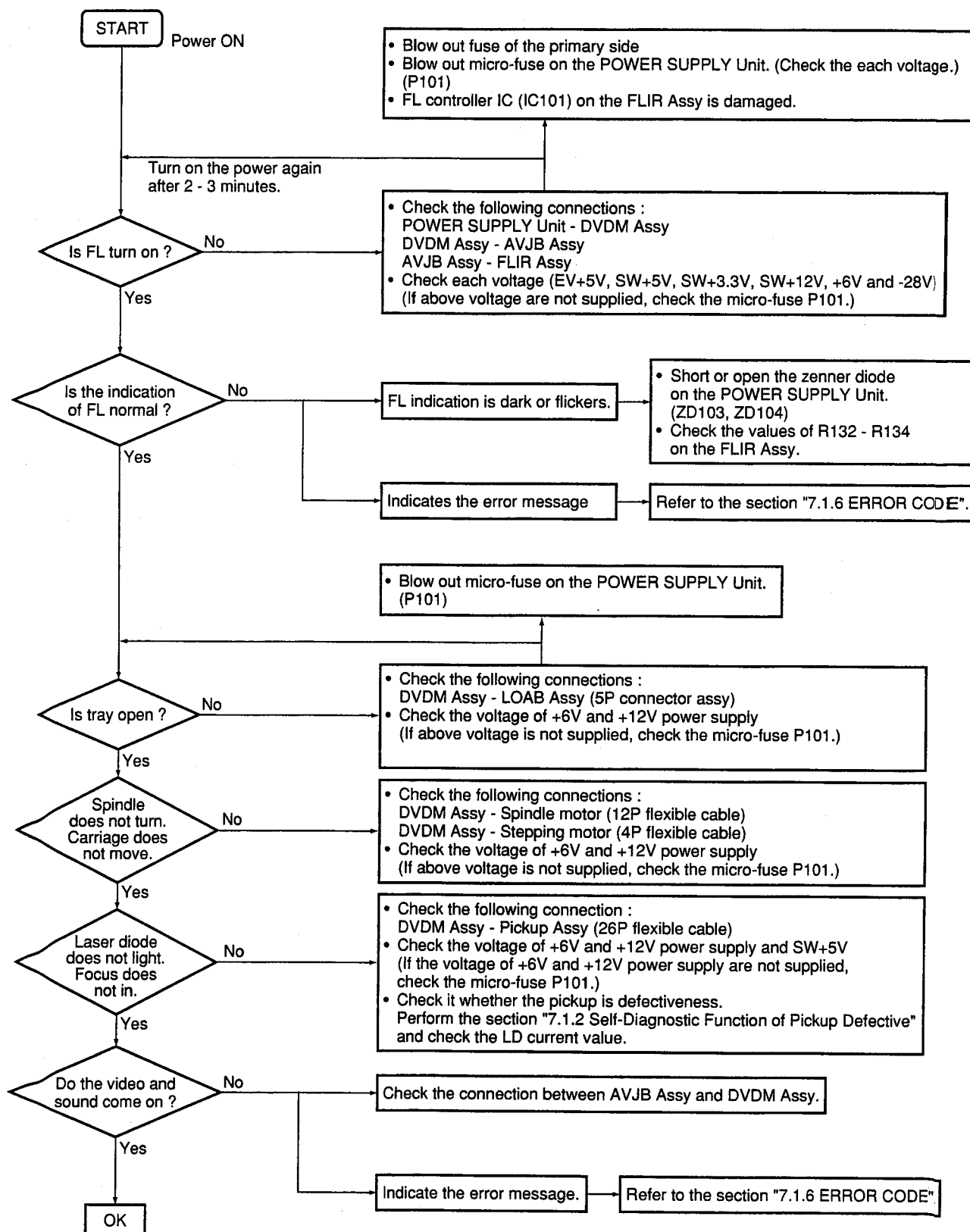
## DV-47A, DV-S733A, DV-747A

15. Disc distinction threshold value (CD and unrecorded disc)  
Threshold value of the disc distinction. Distinguish it from CD if bigger than this value, and distinguish it from an unrecorded disc if small.
16. Current jitter value  
Indicate the value that was read in from the SCRUT (IC701) in DVD, and indicate the value that was read in from the servo DSP in CD.
17. Focus balance setting value of L0
18. Focus balance setting value of L1
19. Current mechanism controller inside mode  
(it does not support in this unit)  
It can indicate to a maximum 10 modes. Indicate only a nest share of the mode.
20. Processing step of 11 inside modes  
(it does not support in this unit)  
It can grasp the current mode, the mode reaching it and transition of step by watching 19 and 20.
21. Spindle control state of SCRUT (IC701)  
(it does not support in this unit)  
OFF : Motor off condition  
A/B : Accelerator and brakes  
FG : FG servo  
RVP : Rough speed phase servo  
ORVP : Rough speed phase servo of offset addition
22. Rotation number of spindle motor  
Do not FG read in ? indication (during spindle stop).
23. Tracking error generation system  
(it does not support in this unit)  
1: 1 beam (DPD)  
3: 3 beams
24. TZC count value (it does not support in this unit)  
The value that counted the number of TZC for one rotation in the tracking open state.  
When this value is more than 512 with CD, set it in 1 beam because the eccentric is large.  
DVD does not measure it because it is 1 beam fixed (indication is 0000).
25. It indicates the frequency that entered the focus backup  
Hexadecimal number indication. Counter does not reset till turns the power off after turning it on. Due to a 1 byte counter, next of FF becomes 00.
26. It indicates focus backup limit frequency with the hexadecimal number  
Initial value is 14H, it does decrement whenever enter the focus backup and it gives up backup if it became 0. Then the error is generated. After reverted from the backup, When not enter the backup and pass fixed time (1500ms), return to initial value again.
27. It indicates the frequency that entered the internal circumference plunging into backup of the sled  
Hexadecimal number indication. Counter does not reset till turns the power off after turning it on. Due to a 1 byte counter, next of FF becomes 00.
28. It indicates the frequency that entered the tracking overrun backup  
Hexadecimal number indication. Counter does not reset till turns the power off after turning it on. Due to a 1 byte counter, next of FF becomes 00.
29. It indicates the limit frequency of tracking overrun backup with a hexadecimal number  
Initial value is 03H, it does decrement whenever enter the tracking overrun backup and it gives up backup if it became 0.
30. It indicates the frequency that entered sled overrun backup  
Hexadecimal number indication. Counter does not reset till turns the power off after turning it on. Due to a 1 byte counter, next of FF becomes 00.
31. It indicates the limit frequency of sled overrun backup with a hexadecimal number  
Initial value is 03H, it does decrement whenever enter the sled overrun backup and it gives up backup if it became 0.
32. It indicates the frequency that entered the tracking close NG backup  
Hexadecimal number indication. Counter does not reset till turns the power off after turning it on. Next of FF is be a 1 byte counter in 00.  
The hexadecimal number indication which indicates the frequency that reads
33. ID/subQ, and entered NG backup  
Hexadecimal number indication. A counter does not reset it till cuts it off after turning it on. Due to a 1 byte counter, next of FF becomes 00.
34. An address to indicate in 35  
Set it by using RS232.I  
(an address) Set it with DA.
35. Contents of an address indicated in 34.



## 7.1.5 TROUBLE SHOOTING

- No Power ON
- FL is not turned ON
- FL indication is unusual





# DV-47A, DV-S733A, DV-747A

## 7.1.6 ERROR CODE

Error codes that are displayed on the FL display without using the remote control unit

FL Display	Possible causes	Operation of the unit
AV1 VER	AV-1 chip is not a match with the program of system controller	The sound may not out with the specific audio.
CPU AERR	CPU address error (Hardware is unusual.)	No operation
DMA AERR	DMA address error (Hardware is unusual.)	No operation
FLASH ID	Difference in versions of the internal ROM of the system controller and of the flash ROM, or bus line failure or reverse installation	No operation
FLASH WRP	Write protect error of the flash ROM	No operation
FLASH SIG	Difference in part number of the flash ROM (When the ROM which could't be used was used.)	No operation
FLASH SUM	Check sum error of the flash ROM (It exceeds the regular size.) or reverse installation (Hardware is unusual.)	No operation
FLASH SIZE	Size error of the flash ROM (Use 4 or 8 M-bit.)	No operation
ILLGAL	The system controller fetched a code other than an operation code (Hardware is unusual.)	No operation
RESERVE	Undefined interrupt (Hardware is unusual.)	No operation
SLOT	Inappropriate slot command issued (Hardware is unusual.)	No operation
SDSP PWER	Access error to the servo DSP or clock does not oscillation (Hardware is unusual.)	Accept only OFF operation of the POWER key of the main unit. Remote control unit is impossible.

Error codes that are displayed on the FL display by using the remote control unit  
(Mechanism controller error)

To display: ESC + DISPLAY + DISPLAY; Location of the display: At the two digits of center of the FL display

To display the error history: ESC + DISPLAY + One shot; Location of the display: TV screen

FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
11	Search timeout	Search could not be complete within 7 seconds.	Search could not be complete within 7 seconds, and it could not enter the target area within 7 seconds by VCD scan.	CD : Stops, DVD : Continues operation
12	Search retry error	A search could not be completed after 3 retries, search backup was executed 4 times, or in a case of timeout (6 seconds) while the unit was tracing 11 tracks or more beyond the target while the search operation was converging.	Backup against slider skip was executed 4 times during a search, or slider skip twice resulted in starting from the read-in point.	CD : Stops, DVD : Continues operation
19	Tracing timeout while converging	Timeout (10.5 seconds) while tracing at the stage of convergence of a search.		Stop
1B	Index 0 search error		During Track (Index) Search, the search for the beginning of a program could not be completed within 3 seconds (20 seconds in the case of Index Search) after positioning based on the TOC data was completed.	Stop
1C	Wobble distinction error	Distinguished RW disc without wobble.		Read the RW control data.
22	Timeout of slider inner circumference	Inside switch could not ON within 3 seconds.		Stop
23	Timeout of slider outer circumference	Inside switch could not OFF within 2 seconds.		Stop



FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
33	No FOK pulse during playback CLVA	When the focus was deviated continuously 20 times.		Adjusts focus at the innermost circumference and tries to return to its position where the error was generated (for 3 times), then opens. If the same error persists after one retry, the tray opens. (No FOK pulse)
38	Disc-type-sensing error	If normal starting was impossible in the following three cases, disc-type sensing will be retried if other errors occur excepting C5 error. However, when the focus error "33" was occurred continuously 3 times, it is finished as "38 error" at the moment: (1) startup with the first disc-type-sensing result, (2) forced startup with another disc by designating the disc type, (3) forced startup with the original disc by designating the disc type.		Open
39	SGC converge timeout	SGC could not converge during detects the peak		Open
41	Spindle timeout	The unit did not enter Stop mode within 10 seconds of issuance of a Stop command.		Stop
48	Spindle FG transition timeout	The spindle could not converge into within $\pm 12\%$ of the target FG rotation speed within 10 seconds after spindle kick. The first time after startup (the first time after disc distinction), it doesn't become the number of the target rotation within five seconds. The first time after startup, detects the abnormal rotation number of high-speed continuously 3 loops. DVD: 5 to 9 mS, CD: 40 to 60 mS		Stops. (FG timeout)
49	Spindle PLL transition timeout	After the second times after startup, it doesn't become the number of the target rotation within five seconds. Detects the abnormal high-speed or low-speed rotations. DVD: 5 to 9 mS, CD: 40 to 60 mS		Stops. ("73" is displayed during starting process.)
4A	Spindle lock timeout	Spindle could not lock more than 1.5 seconds before start the AFB.		Stops. ("73" is displayed during starting process.)
51	Auto sequence timeout of peak detection	ABUSY did not return within 1 second after the DDTCT (peak detection) command was sent.		Stop
52	Auto sequence timeout of focus jump down	ABUSY did not return within 30 mS after the FJMPD (Focus jump 1 to 0) command was sent.		Stop
53	Auto sequence timeout of focus jump up	ABUSY did not return within 30 mS after the FJMPU (Focus jump 0 to 1) command was sent.		Stop
54	Auto sequence timeout of play AGC	ABUSY did not return within 50 mS after the GSUMON (play-AGC-measuring) command was sent.		Stop
55	Auto sequence timeout of disc-type-sensing	ABUSY did not return within 2 seconds after the DJSRT (disc-sensing) command was sent.		Stop
56	Auto sequence timeout of ATB2	ABUSY did not return within 1 second after the TBLOFS (Internal ATB after the completion of external ATB) command was sent.		Stop
57	Auto sequence timeout of tracking servo ON	ABUSY did not return within 500 mS after the TSON (tracking servo ON) command was sent.		Stop
58	Auto sequence timeout of ATB1	ABUSY did not return within 200 mS after the TBL (external ATB) command was sent.		Stop
59	Auto sequence timeout of focus gain adjustment	ABUSY did not return within 2 seconds after the FGN (focus gain adjustment) command was sent.		Stop
5A	Auto sequence timeout of tracking gain adjustment	ABUSY did not return within 2 seconds after TGN (tracking gain adjustment) command was sent.		Stop
5B	Auto sequence timeout of offset adjustment	ABUSY did not return within 1 second after the CMDAVE (offset adjustment) command was sent.		Stop



# DV-47A, DV-S733A, DV-747A

FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
5C	Auto sequence timeout of modulation factor measurement	ABUSY did not return within 200 mS after the ADJMIR (modulation factor measurement) command was sent.		Stop
5D	Auto sequence timeout of auto focus bias	ABUSY did not return within 2 seconds after the AFB (auto focus bias) command was sent.		Stop
5F	Auto sequence already busy	A command could not be sent because ABUSY was low. ABUSY did not return within 200 mS after TLV command was sent.		Stop
62	Pause retry error	Pause mode could not be restored within three retries after it had been released.		Continues operation
71	ID can not read during tracing	An ID could not be read for 1 second or more.		Stop
72	Subcode check failure during playback		No frame could be read for 3 seconds or more.	Stop
73	ID can not read at the startup	An ID could not be read within 1 second after the AFB adjustment had been finished.		Opens (ID readout failure)
74	Subcode check failure during startup		No subcode could be read within 3 seconds after AFB adjustment had been finished.	Opens (Subcode readout failure).
81	Timeout for reading TOC of the mechanism controller		TOC readout took 30 seconds or more.	Stop
82	Timeout for reading TOC of the system controller		Reading TOC of the system controller took 30 seconds or more.	Stop
A1	Communication timeout of DSP command	A command could not be issued to DSP because Command Busy (XCBUSY) was in force (XCBUSY = L) for a specified time (about 200 mS).		Open
A2	Communication timeout for reading DSP coefficient	Command Busy (XCBUSY) was in force for a specified time (about 200 mS) before and after a coefficient read command was issued to DSP, or the address echo-back after command issuance did not match the setup address.		Open
A3	Communication timeout for writing DSP coefficient	Command Busy (XCBUSY) was in force for a specified time (about 1024 mS) before and after the coefficient write command was issued to DSP.		Open
A4	Communication timeout for continuously writing DSP coefficient	Command Busy (XCBUSY) was in force for 200 $\mu$ S during continuous coefficient writing, or before and after a continuous write command was issued to DSP.		Open
B1	Timeout error for backup	In the tracing state during the backup sequence, codes could not be read for 1 second or more. In the backup sequence, tracking ON sequence of the servo DSP could not be completed even if more than 500 mS after the tracking ON command was issued.		Stops
B2	Retry error for backup	Tracing impossible after retring the tracking ON for 3 times in the backup sequence.		Stops
B3	Retry error for trace	During tracing, runaway was detected after three iterations of backup operations for detecting runaway.		Stops
C3	Detection of tracking overcurrent	During playback, the overcurrent detection port was at L for 300 ms or more continuously.		Stops (the mechanical controller operates independently).
(C5)	Short-circuit test corresponding error	While the power was on, the overcurrent detection port was at L for 40 ms or more continuously.		Turns off the power instantly (No indication on the FL display and no writing to flash memory)
E3	Violation against digital copy guard			Stops



FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
F5	Tray being pushed	The tray switch that had been Open mode was forcibly changed to a mode other than Open by an external force.		Closes
F8	Loading timeout	Loading, unloading or clamping could not be completed within a specified time (about 5 seconds).		Reverses the loading direction. If timeout is repeated upon retry, the unit stops.
FC	Focus	The following error occurred eight times. (1) Focus ON sequence could not be completed even if more than two seconds after the focus ON command (to the servo DSP) was sent. (2) Focus IN sequence was finished, actually focus IN was not completed.		Stops wherever possible then opens (stops in the case of side B).

**Error codes that are displayed on the FL display by using the remote control unit (Device error)**

**To display : ESC + DISPLAY + DISPLAY ; Location of the display : At the two digits of left of the FL display**

FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
bit3=1 08 etc.	AV1 access error (read, write NG)			No operation or it becomes debugging indication if the power is able to ON.
bit2=1 04 etc.	MY CHIP access error			
bit1=1 01 etc.	SRAM access error			



## 7.1.7 DISASSEMBLY

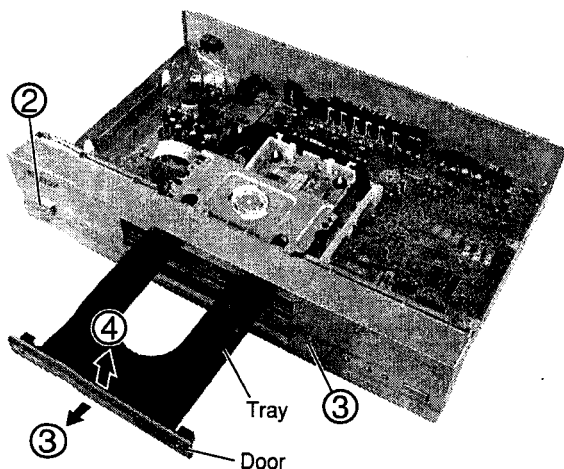
### ■ DIAGNOSIS OF PCBs

#### Note

When diagnosing the unit, be sure to use two connection cables for service. (Part No. : GGD1271)

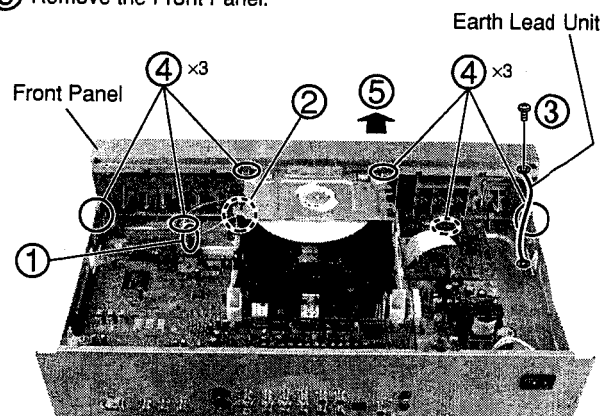
#### 1 Bonnet and Tray Panel

- ① Remove the Bonnet (Screws × 7)
- ② Power ON
- ③ Tray open (▲)
- ④ Remove the Tray Panel



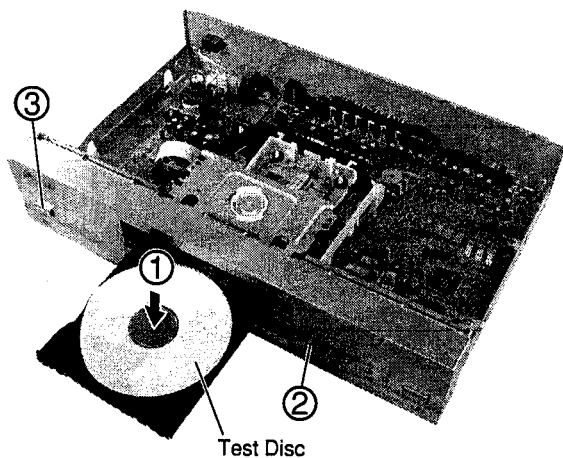
#### 3 Front Panel

- ① Unclamp the wire.
  - ② Disconnect the wiring.
  - ③ Remove the Earth Lead Unit (Screw × 1).
  - ④ Unhook (×6)
  - ⑤ Remove the Front Panel.
- Except DV-47A



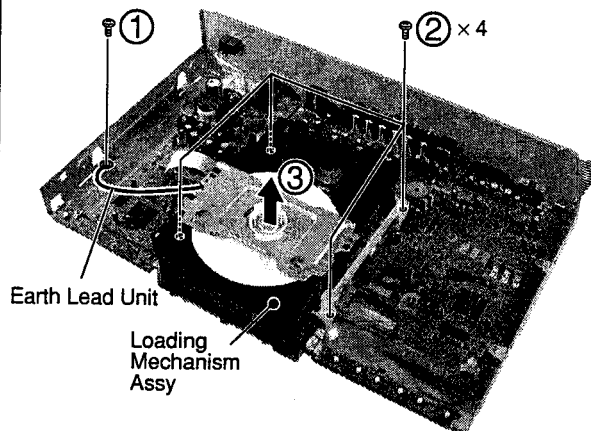
#### 2 Test Disc Set

- ① Set the Test Disc
- ② Tray close (▲) → Clamp the Test Disc
- ③ Power OFF
- ④ Pull out the Power Cord from the outlet



#### 4 Loading Mechanism Assy

- ① Remove the Earth Lead Unit (Screw × 1).
- ② Remove four screws.
- ③ Remove the Loading Mechanism Assy. (Remove the Connector (×2).)





FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
F5	Tray being pushed	The tray switch that had been Open mode was forcibly changed to a mode other than Open by an external force.		Closes
F8	Loading timeout	Loading, unloading or clamping could not be completed within a specified time (about 5 seconds).		Reverses the loading direction. If timeout is repeated upon retry, the unit stops.
FC	Focus	The following error occurred eight times. (1) Focus ON sequence could not be completed even if more than two seconds after the focus ON command (to the servo DSP) was sent. (2) Focus IN sequence was finished, actually focus IN was not completed.		Stops wherever possible then opens (stops in the case of side B).

**Error codes that are displayed on the FL display by using the remote control unit (Device error)**

**To display : ESC + DISPLAY + DISPLAY ; Location of the display : At the two digits of left of the FL display**

FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
bit3=1 08 etc.	AV1 access error (read, write NG)			No operation or it becomes debugging indication if the power is able to ON.
bit2=1 04 etc.	MY CHIP access error			
bit1=1 01 etc.	SRAM access error			



## 7.1.7 DISASSEMBLY

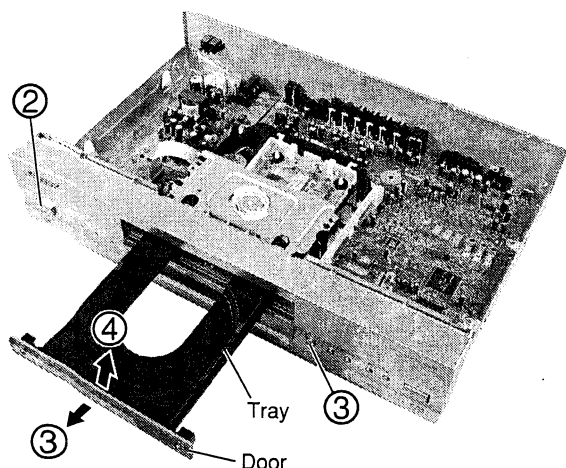
### ■ DIAGNOSIS OF PCBs

#### Note

When diagnosing the unit, be sure to use two connection cables for service. (Part No. : GGD1271)

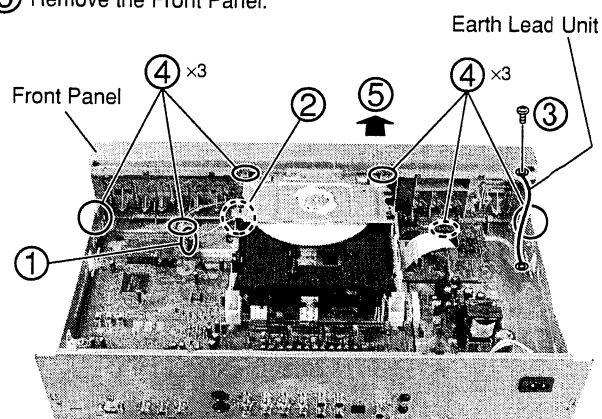
#### 1 Bonnet and Tray Panel

- ① Remove the Bonnet (Screws × 7)
- ② Power ON
- ③ Tray open (▲)
- ④ Remove the Tray Panel



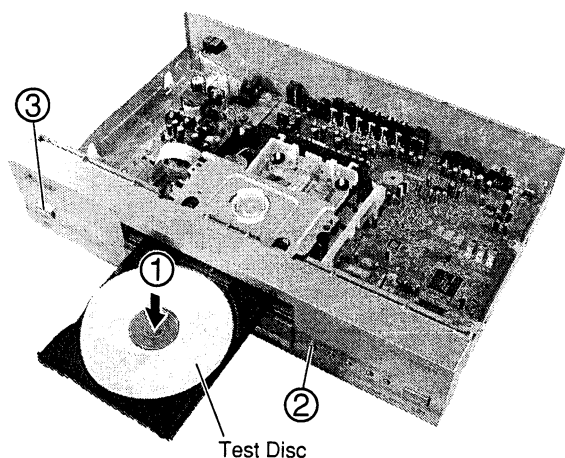
#### 3 Front Panel

- ① Unclamp the wire.
  - ② Disconnect the wiring.
  - ③ Remove the Earth Lead Unit (Screw × 1).
  - ④ Unhook (×6)
  - ⑤ Remove the Front Panel.
- Except DV-47A



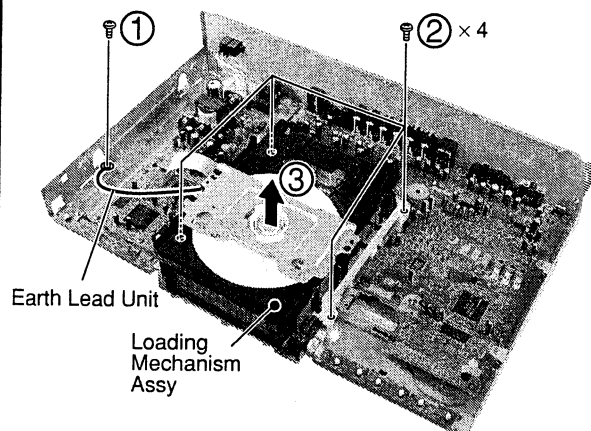
#### 2 Test Disc Set

- ① Set the Test Disc
- ② Tray close (▲) → Clamp the Test Disc
- ③ Power OFF
- ④ Pull out the Power Cord from the outlet



#### 4 Loading Mechanism Assy

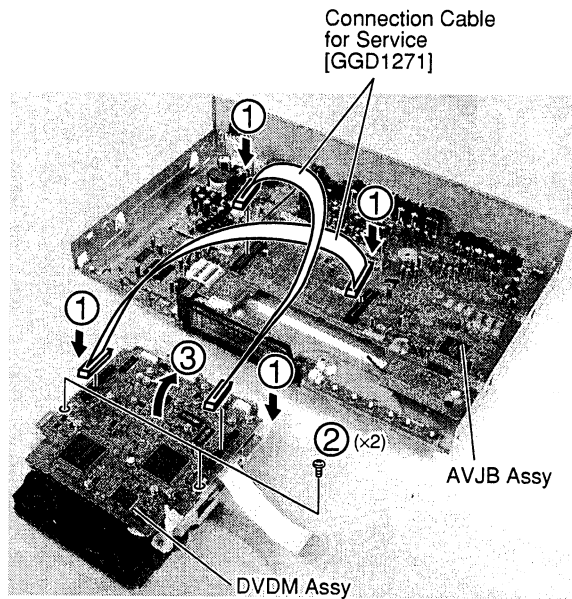
- ① Remove the Earth Lead Unit (Screw × 1).
- ② Remove four screws.
- ③ Remove the Loading Mechanism Assy. (Remove the Connector (×2).)





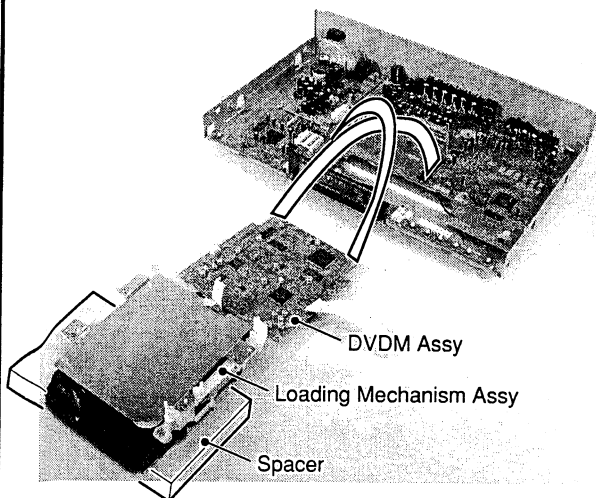
## 5 Styling of the Connection Cables

- ① Connect two Connection Cables for Service (GGD1271) between DVDM Assy and AVJB Assy.
- ② Remove two screws.
- ③ Remove the DVDM Assy.



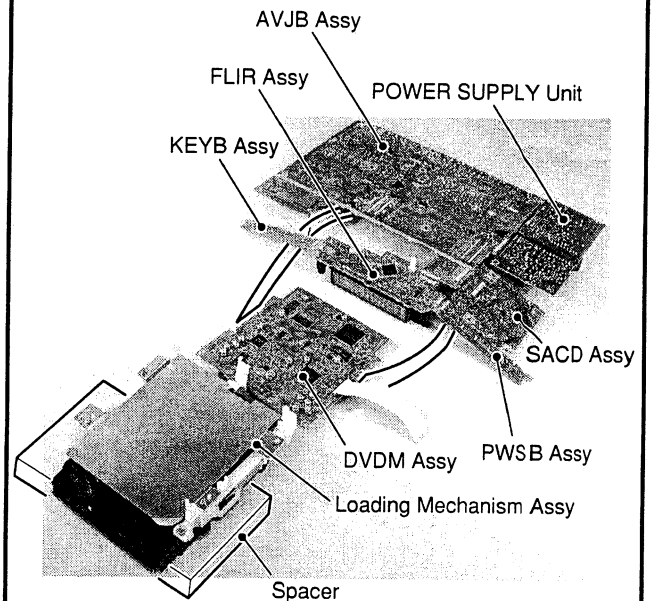
## 6 Diagnosis (1)

- ① Arrange the Loading Mechanism Assy and the DVDM Assy like the figure below.
- ② Put in spacers under the Loading Mechanism Assy not to rub the Clamper.
- ③ Playback with a test disc, and diagnose the DVDM Assy and the other Assys.



## 7 Diagnosis (2)

- ① Unscrew the Rear Panel and remove the Rear Panel.  
**Cautions:**  
Please install AC inlet Assy in POWER SUPPLY Unit once again after having detached it with a rear panel.
- ② Unscrew the PCBs and remove the PCBs.
- ③ Arrange the Loading Mechanism Assy and the PCBs like the figure below.
- ④ Playback with a test disc, and diagnose the AVJB Assy and the other Assys.

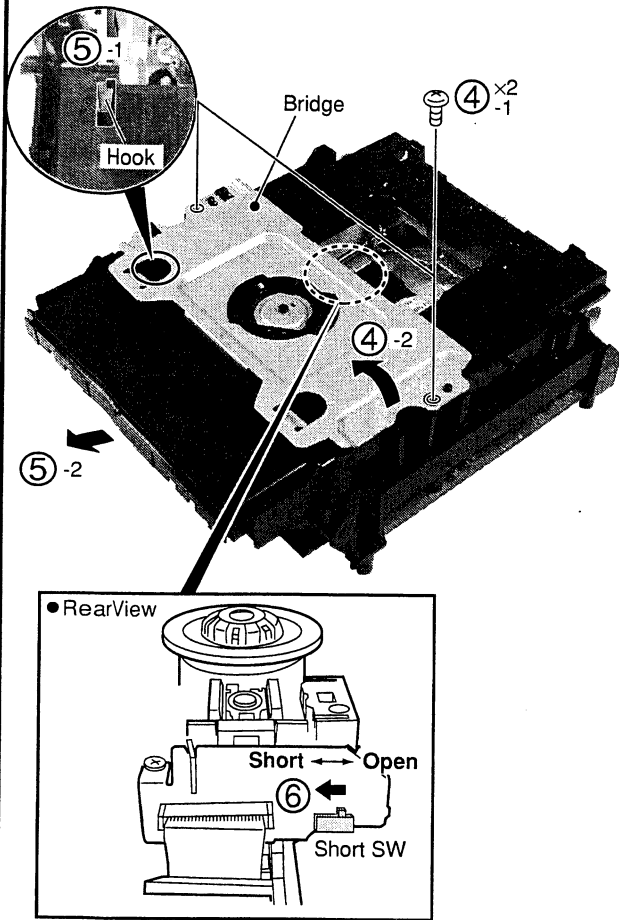


👉 In a diagnosis (1) (2), You cannot play SACDs.

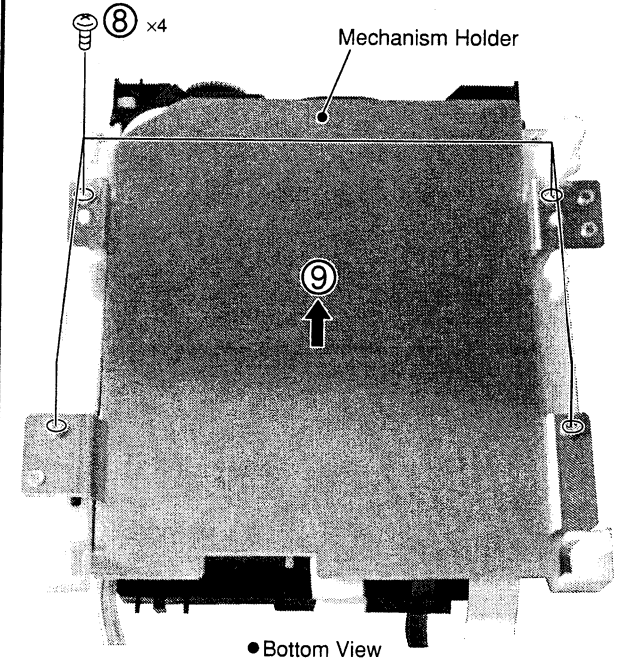


## Disassembly of the Traverse Mechanism Assy and the Pickup Assy

- ① Remove the Bonnet and Tray Panel.
- ② Remove the Front Panel.
- ③ Remove the Loading Mechanism Assy (Screws ×4).
- ④ Remove the Bridge (Screw ×2).
- ⑤ Pull out the Tray and remove it while unhooking a Hook.
- ⑥ Turn the Short SW to Short side.



- ⑦ Remove the DVDM Assy (Screws ×2).
- ⑧ Remove four screws.
- ⑨ Remove the Mechanism Holder.

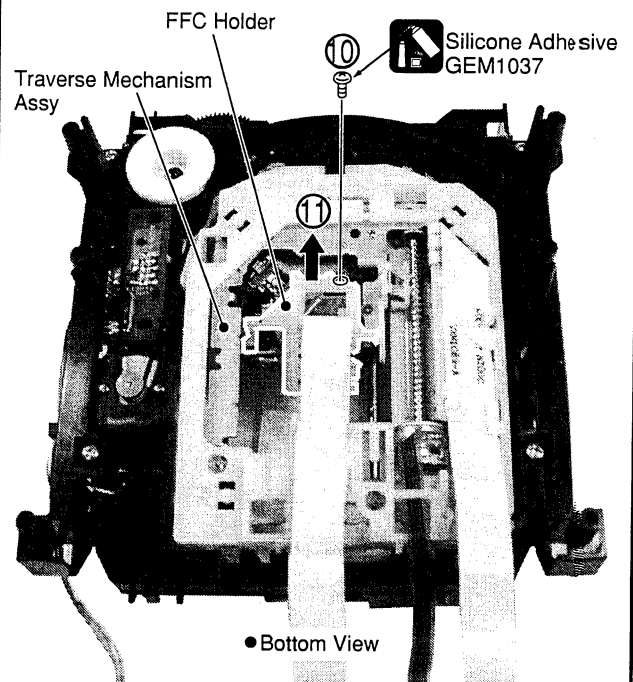


- ⑩ Remove a screw.

### Cautions:

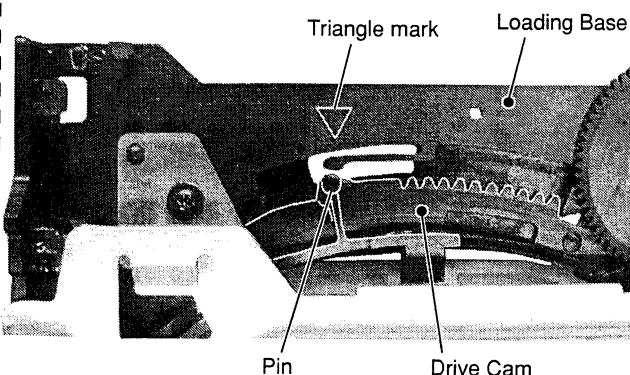
Screw is locked with Silicone adhesive.  
Please lock it with Silicone adhesive when installs it.

- ⑪ Remove the FFC Holder with the state which Flexible Cable was attached.



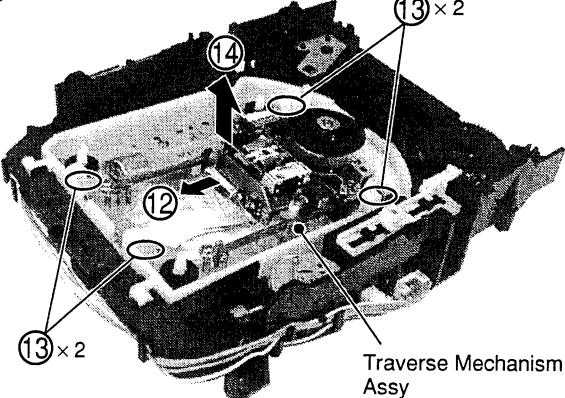
### Caution in the tray insertion

In the Tray insertion, insert it after matching a triangle mark of the Loading Base and a position of pin of the Drive Cam.



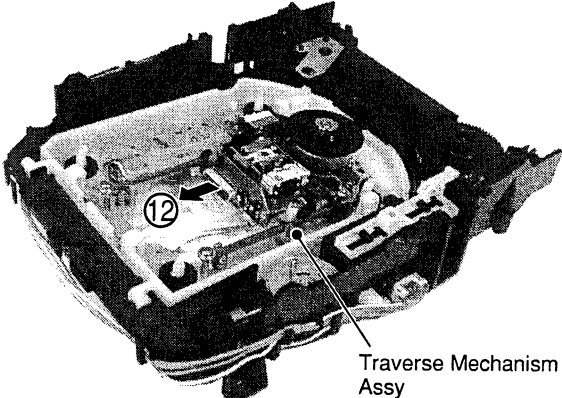


● When Removing The Traverse Mechanism Assy

- ⑫ Remove the Pickup Flexible Cable
  - ⑬ Unhook ( ×4)
  - ⑭ Remove the Traverse Mechanism Assy
- 

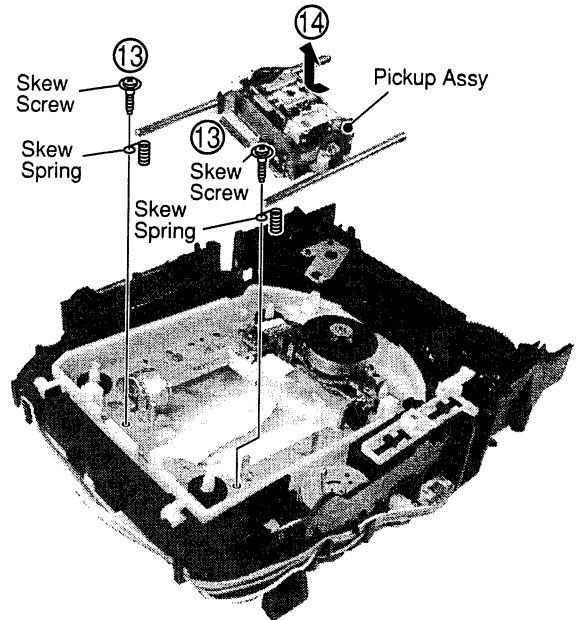
Exchange

● When Removing The Pickup Assy

- ⑫ Remove the Pickup Flexible Cable.
- 

Traverse Mechanism Assy

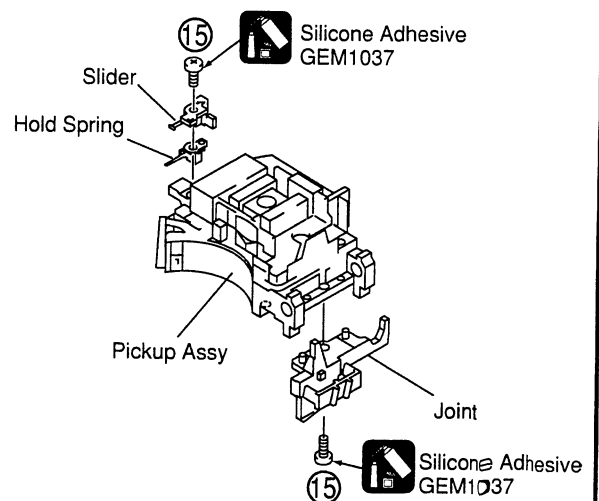
- ⑬ Remove two Skew Screws and two Skew Springs.
- ⑭ Remove the Pickup Assy.



- ⑮ Remove two screws.

**Cautions:**

Screw is locked with Silicone adhesive.  
Please lock it with Silicone adhesive when installs it.



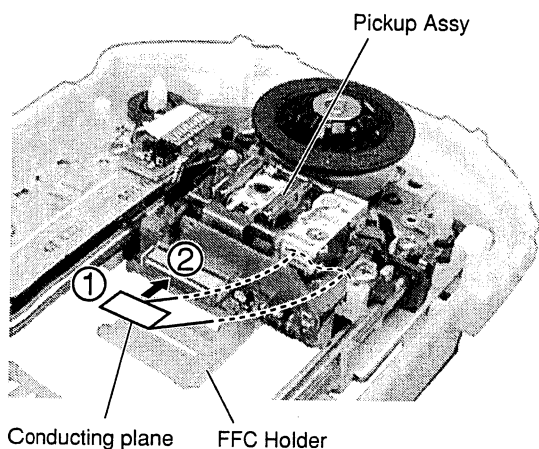
Exchange



# DV-47A, DV-S733A, DV-747A

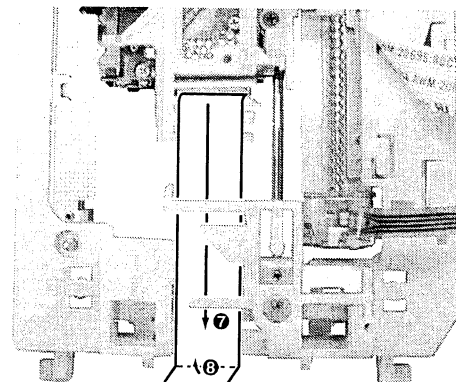
## Styling the Pickup Flexible Cable

- ① Fold a edge of lining part of the Pickup Flexible Cable.
- ② Insert the Pickup Flexible Cable in connector, and lock it surely.



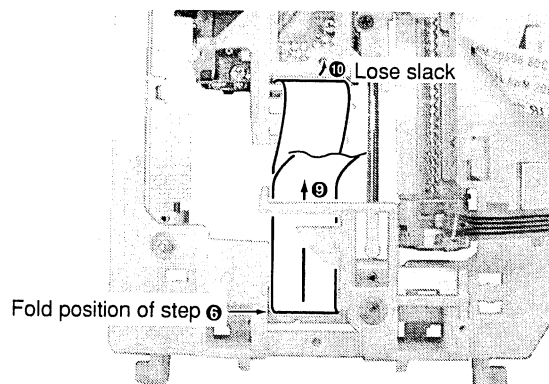
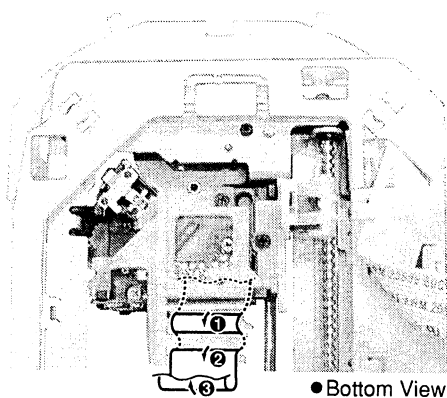
### Caution:

Move the Pickup to the innermost of the disc.



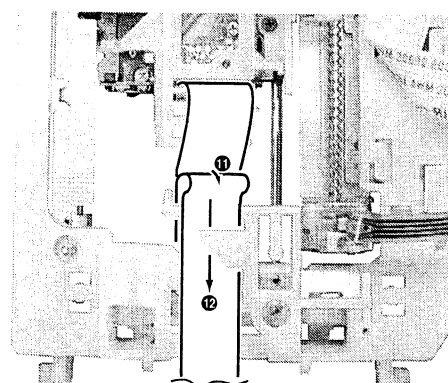
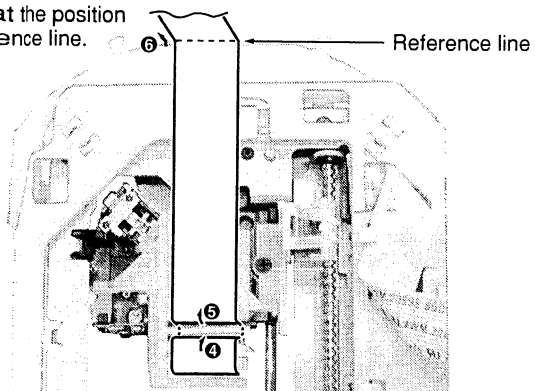
● Bottom View

- ③ Perform the styling as shown in figure below.



● Bottom View

Fold it at the position of reference line.



● Bottom View



## 7.2 IC

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

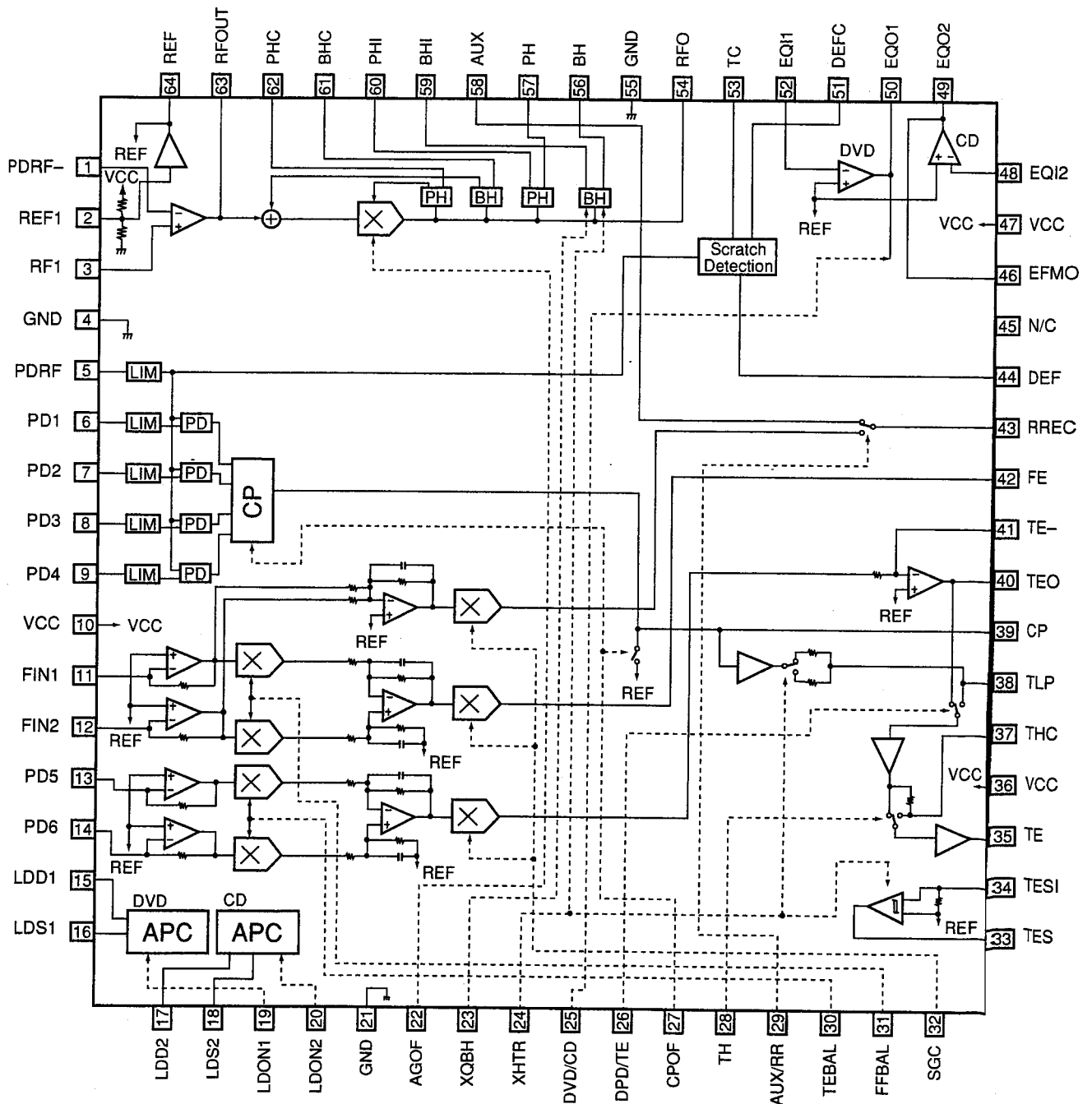
### •List of IC

LA9701M, LC78652W, BA6664FM, PD6345A, M65774BFP, XCA5636PV150, ADV7300KST, PM0033A, PE5251A, CXD2753R

### ■ LA9701M (DVDM ASSY : IC101)

#### • RF IC

#### • Block Diagram



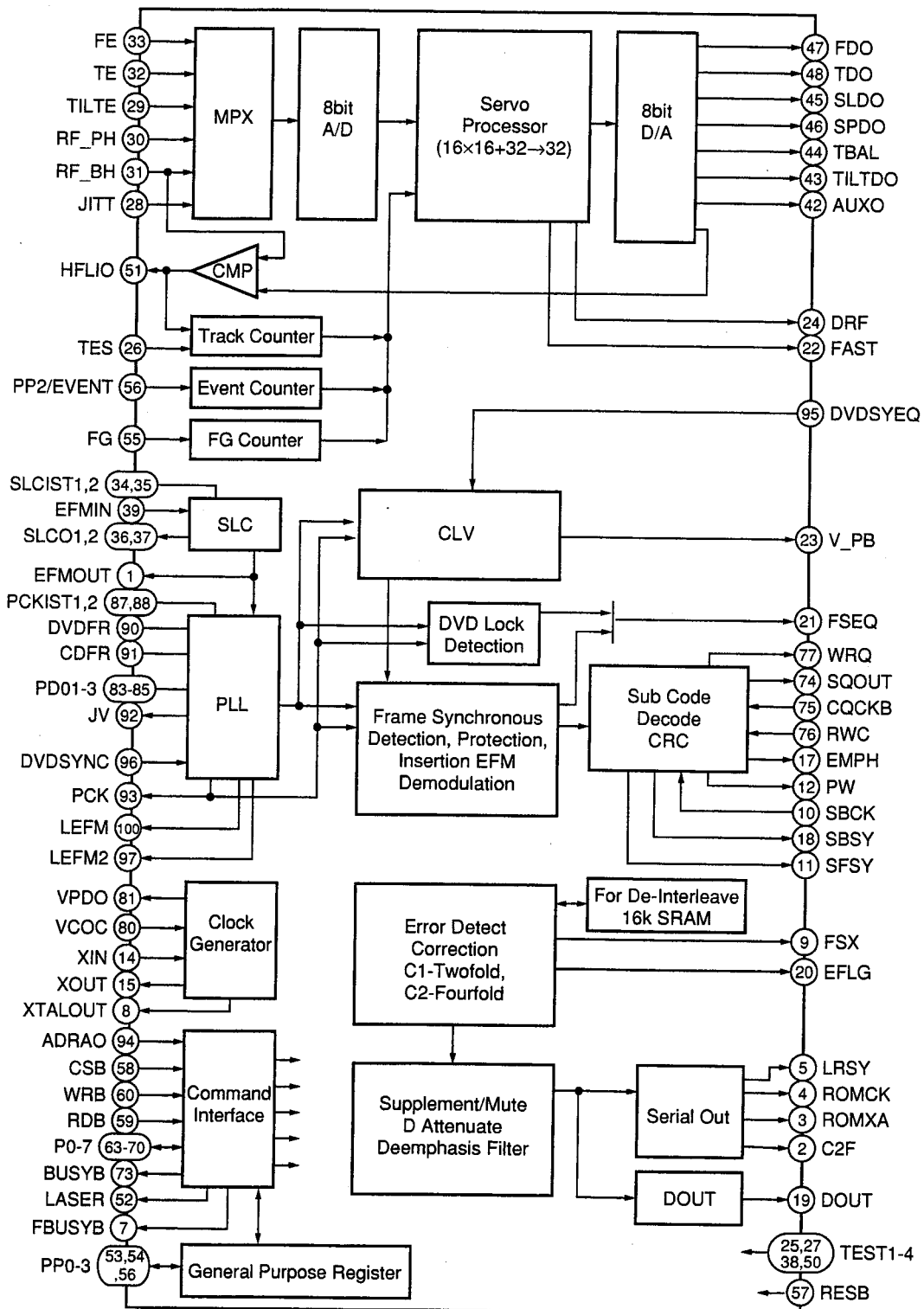


# DV-47A, DV-S733A, DV-747A

## ■ LC78652W (DVDM ASSY : IC201)

### • Servo DSP IC

### • Block Diagram





## ● Pin Function

No.	Pin Name	I/O	Pin Function
1	EFMOUT	O	Output the state that was binary-stated value EFM
2	C2F	O	C2 flag output
3	ROMXA	O	CD-ROM data output
4	ROMCK	O	Shift clock output for CD-ROM data output
5	LRSY	O	L/R clock output for CD-ROM data output
6	PP3	I/O	General-purpose port input/output / DVD sync. signal input      N ch-OD output
7	FBUSYB	O	Busy signal output of DSP process operation      N ch-OD output
8	XTALOUT	O	External system clock output
9	FSX	O	CD 1 frame sync. signal output
10	SBCK	I	Subcode reading out clock input
11	SFSY	O	Frame sync. signal output of subcode
12	PW	O	Subcode P, Q, R, S, T, U, V and W output
13	VSS	–	GND pin
14	XIN	I	Connect a crystal resonator (16.9344MHz)
15	XOUT	O	Connect a crystal resonator
16	DVDD1	–	3.3V power supply of the oscillation circuit
17	EMPH	O	Monitor pin of the deemphasis
18	SBSY	O	Sync. signal output of the subcode block
19	DOUT	O	Audio EIAJ data output
20	EFLG	O	Error correction state monitor of the error correction C1 and C2
21	FSEQ	O	Detection monitor of the CD/DVD frame sync. signal
22	FAST	O	Playback speed monitor      N ch-OD output
23	V_PB	O	Monitor output of the rough servo/CLV control
24	DRF	O	In focus monitor
25	TEST3	I	Test input 3
26	TES	I	Tracking error signal input
27	TEST2	I	Test input 2
28	JITT	I	Jitter quantity detecting signal input of EFM PLL
29	TILTE	I	Tilt error signal input
30	RF_PH	I	RF peak hold signal input
31	RF_BH	I	RF bottom hold signal input
32	TE	I	Tracking error signal input
33	FE	I	Focus error signal input
34	SLCIST1	–	Current setting pin 1 of the constant current charge pump for SLC
35	SLCIST2	–	Current setting pin 2 of the constant current charge pump for SLC
36	SLCO1	O	Control output 1 for SLC
37	SLCO2	O	Control output 2 for SLC
38	TEST1	I	Test input 1
39	EFMIN	I	EFM/EFM + input
40	AVDD	–	5V power supply of A/D and D/A for servo
41	AVSS	–	GND of A/D and D/A for servo
42	AUXO	O	DA auxiliary output
43	TILTDO	O	Tilt control signal output
44	TBAL	O	Tracking balance control signal output
45	SLDO	O	Sled control signal output
46	SPDO	O	Spindle control signal output
47	FDO	O	Focus control signal output
48	TDO	O	Tracking control signal output
49	VREF	–	Reference level of D/A for servo
50	TEST4	I	Test input 4



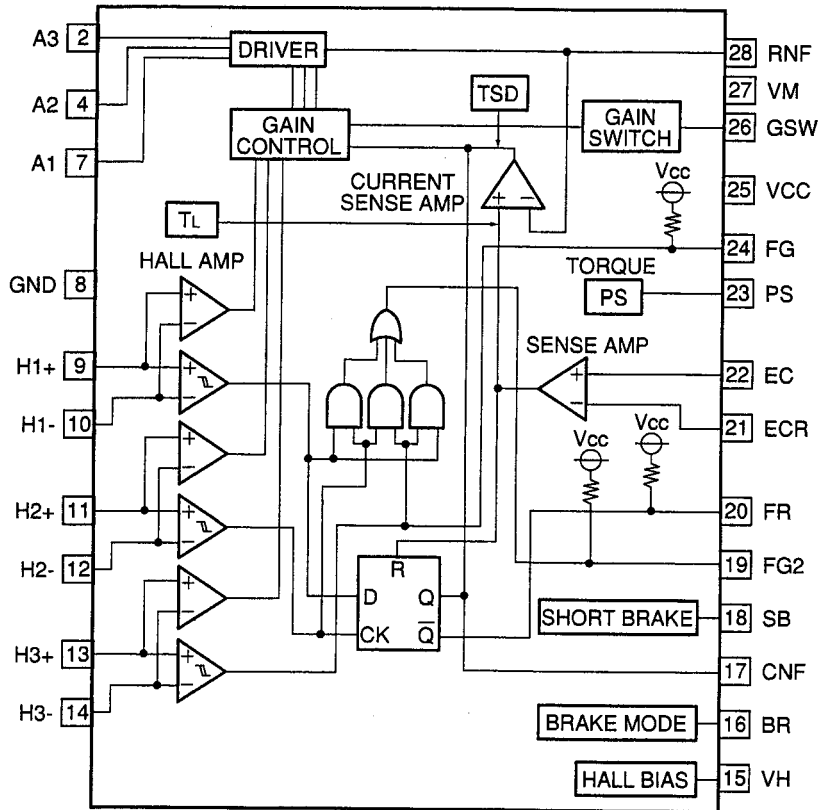
# DV-47A, DV-S733A, DV-747A

No.	Pin Name	I/O	Pin Function
51	HFLIO	I/O	Mirror detection signal input/output
52	LASER	O	Output pin for laser ON/OFF control
53	PP0/DVD_CDB	I/O	General-purpose port input/output / Disc discrimination signal output
54	PP1/CRCERRB	I/O	General-purpose port input/output / Subcode CRC result signal output
55	FG	I	FG counter input
56	PP2/EVENT	I/O	General-purpose port input/output / Event counter input
57	RESB	I	Reset input
58	CSB	I	Chip select input
59	RDB	I	Internal state reading signal input
60	WRB	I	Command / data writing signal input
61	DVDD2	–	5V power supply
62	VSS	–	GND
63	P0	I/O	Command / data input/output
64	P1		
65	P2		
66	P3		
67	P4		
68	P5		
69	P6		
70	P7		
71	VSS	–	GND
72	DVDD1	–	3.3V power supply for internal
73	BUSYB	O	Busy signal output of command process
74	SQOUT	O	Serial output of subcode Q
75	CQCKB	I	Shift clock input for subcode Q data output
76	RWC	I	Update permission input of subcode Q
77	WRQ	O	Read out ready monitor of subcode Q
78	AVSS	–	PLL GND for internal system clock
79	VRPFR	–	VCO oscillation range setting of PLL for system clock
80	VCOO	I	Connect a PLL filter for system clock
81	VPDO	O	
82	AVDD	–	PLL 5V power supply for system clock
83	PDO1	I/O	PLL filter connection pin 1 for EFM playback
84	PDO2	I/O	PLL filter connection pin 2 for EFM playback
85	PDO3	I/O	PLL filter connection pin 3 for EFM playback
86	AVSS	–	PLL GND for EFM playback
87	PCKIST1	–	Current setting 1 of PLL constant current charge pump for EFM playback
88	PCKIST2	–	Current setting 2 of PLL constant current charge pump for EFM playback
89	AVDD	–	PLL 5V power supply for EFM playback
90	DVDFR	–	VCO oscillation range setting of PLL for EFM playback 1
91	CDFR	–	VCO oscillation range setting of PLL for EFM playback 2
92	JV	O	Jitter output of PLL clock for EFM playback
93	PCK	O	Bit clock output for EFM playback
94	ADRA0	I	Address input
95	DVDSYEQ	I	DVD synchronize pulse input
96	DVDSYNC	I	DVD synchronous signal input
97	LEFM2	O	Output the state that cut and out a signal which was binary-stated value EFM with PCK 2
98	DVDD1	–	3.3V power supply for I/O
99	VSS	–	GND
100	LEFM	O	Output the state that cut and out a signal which was binary-stated value EFM with PCK 1



■ BA6664FM (DVDM ASSY : IC251)

- Three-phase Motor Driver
- Block Diagram



• Block Diagram

No.	Pin Name	Pin Function	No.	Pin Name	Pin Function
1	N.C.	N.C.	16	BR	Brake mode switching pin
2	A3	Output pin	17	CNF	Capacitor connection pin for phase compensation
3	N.C.	N.C.	18	SB	Short brake pin
4	A2	Output pin	19	FG2	FG 3-phase mix signal output pin
5	N.C.	N.C.	20	FR	Rotation detecting pin
6	N.C.	N.C.	21	ECR	Control reference pin of output voltage
7	A1	Output pin	22	EC	Output voltage control pin
8	GND	GND pin	23	PS	Power save pin
9	H1+	Hall signal input pins	24	FG	FG signal output pin
10	H1-		25	VCC	Power supply pin
11	H2+		26	GSW	Gain switching pin
12	H2-		27	VM	Motor power pin
13	H3+		28	RNF	Resistor connection pin for output current detection
14	H3-		FIN	FIN	GND
15	VH	Hall bias pin			



# DV-47A, DV-S733A, DV-747A

## ■ PD6345A (DVDM ASSY : IC601)

### • FR CPU

### • Pin Function

No.	Mark	Pin Name	I/O	Pin Function
1	P20/D16	D0	I/O	Data bus input/output
2	P21/D17	D1		
3	P22/D18	D2		
4	P23/D19	D3		
5	P24/D20	D4		
6	P25/D21	D5		
7	P26/D22	D6		
8	P27/D23	D7		
9	P30/D24	D8		
10	P31/D25	D9		
11	P32/D26	D10		
12	P33/D27	D11		
13	P34/D28	D12		
14	P35/D29	D13		
15	P36/D30	D14		
16	P37/D31	D15		
17	VSS	GND	-	Ground
18	P40/A00	A0	O	Address bus output
19	P41/A01	A1		
20	P42/A02	A2		
21	P43/A03	A3		
22	P44/A04	A4		
23	P45/A05	A5		
24	P46/A06	A6		
25	P47/A07	A7		
26	VCC3	V+3.3D	-	Power supply
27	VCC2	V+2.5D	-	Power supply
28	P50/A08	A8	O	Address bus output
29	P51/A09	A9		
30	P52/A10	A10		
31	P53/A11	A11		
32	P54/A12	A12		
33	P55/A13	A13		
34	P56/A14	A14		
35	P57/A15	A15		
36	VSS	GND	-	Ground
37	P60/A16	A16	O	Address bus output
38	P61/A17	A17		
39	P62/A18	A18		
40	P63/A19	A19		
41	P64/A20	A20		
42	P65/A21	TOFSTA	O	Tracking offset injection -A for servo
43	P66/A22	TOFSTC	O	Tracking offset injection -C for servo
44	P67/A23	WBL	O	For Wobble detection corresponding to DVD R/W (main)
45	DAVS	GND	-	Ground
46	DAVC	V+3.3D	-	Power supply
47	DAO	STEP1	I	For stepping motor control
48	DA1	STEP2	I	
49	DA2	LODRV	I	Loading, door and select motor drive



No.	Mark	Pin Name	I/O	Pin Function
50	AN0	STEP2	I	For stepper control 2 For offset cancel of D/A output
51	AN1	STEP1	I	For stepper control 1 For offset cancel of D/A output
52	AN2	NAP SW	I	Rear panel H/M/L=M/A/P
53	AN3	XOEM	I	OEM model protection input
54	AN4	LD CUR	I	Input for LD current value indication
55	AN5	SELPOS	I	Tray selector input of microchanger
56	AN6	CLAMPSW	I	Clamp position SW input
57	AN7	LODPOS	I	Loading clamp position SW input
58	AVCC	V+3.3D	-	Power supply
59	AVRH	V+3.3D	-	Power supply
60	AVSS/AVRI	GND	-	Ground
61	VSS	GND	-	Ground
62	PP0/ATGX	SLDPOS	I	SW input of slider inside position
63	PP1/FRCK	GSW	O	Gain up at ACBR (at ACBR: H, others: L)
64	PP2/IN0	780ON	I	ON/OFF control signal of 780nm laser diode
65	PP3/IN1	SEDO	O	Tray rotation drive output
66	PP4/IN2	XMON	O	Mute of DRV (spindle motor ON: H)
67	PP5/IN3	XDRVMUT	O	FTS driver mute output
68	PP6	LT1	O	Communication response to the FL controller
69	PP7	XRDY	I	Communication request from the FL controller
70	VCC3	V+3.3D	-	Power supply
71	VCC2	V+2.5D	-	Power supply
72	PO0/OC0	XCURDET	I	Actuator current detection input Servo OFF for "L" 300ms
73	PO1/OC1	XCBUSY	I	Busy signal of command process Command acceptable : "L"
74	PO2/OC2	XDSPRST	O	Servo DSP reset
75	PO3/OC3	BCA	-	BCA read signal (at BCA read: H) (Not used)
76	PO4/OC4	DSSENS/ XCD4X	I/O	Disc detection pulse "L": Disc exist Correspond to fourth speed CD playback ("L": Fourth speed)
77	PO5/OC5	PPCNT	O	Switch of TZC in WBL traversal (at PP: H)
78	PO6/OC6	XDFINH	O	Defect signal control (DEFECT ON: Hi-Z; OFF: "L")
79	PO7/OC7	DPD/TE	O	H=1 beam, L=3 beams
80	VSS	GND	-	Ground
81	PN0/AIN0	DVD/XCD	O	RF EQ switching signal at DVD/CD "H": DVD, "L": CD
82	PN1/BIN0	AGOFF	O	"H": Turn off AGC of RFIC
83	PN2/AIN1	650X780	O	780nm/650nm switching signal
84	PN3/BIN1	LD ON	O	ON/OFF control signal of laser diode
85	PN4/AIN2	FOFST2	O	Focus offset adjustment 1 (Tri-value control "H", "L", Hi-Z)
86	PN5/BIN2	FOFST1	O	Focus offset adjustment 2 (Tri-value control "H", "L", Hi-Z)
87	PN6/AIN3	XCD2X	O	For VCD double speed playback
88	PN7/BIN3	OEICG	O	"H": Gain of OEIC up to 6dB
89	PM0/ZIN0	TRYPOS	I	Count input of disc number
90	PM1/ZIN1	NXP SW	O	Video encoder control port (NTSC/PAL)
91	PM2/ZIN2	V SEL	O	(Composite, S) / (YCbCr) or (RGB) switch
92	PM3/ZIN3	V SEL2	O	(Composite) of skirt terminal / (S) switch
93	PL0/SDA1	SDAI		12C control lines
94	PL1/SDA0	SDAO		
95	PL2/SCL1	SCLI		
96	PL3/SCL0	SCLO		
97	PL4	CTS	I	RS-232C clear to send input
98	PL5	DTR	O	RS-232C clear to send output
99	PL6/UC0	-	-	-
100	VSS	GND	-	Ground



# DV-47A, DV-S733A, DV-747A

No.	Mark	Pin Name	I/O	Pin Function
101	PK0/TIN0	XVQERST	O	VQE3 reset signal
102	PK1/TIN1	XCSPRO1	-	Serial communication enable of the progressive converter IC
103	PK2/TIN2	XCSVQE5	-	Serial communication enable of VQE5 IC
104	PK3/TIN3	N.C.	-	N.C.
105	PK4/TOT0	44X48	O	DAC and DASP supply clock fs 44/48 selection
106	PK5/TOT1	DI ERR	I	DIR reception error (unlock signal) input
107	PK6/TOT2	XMICON2 AOSEL1	O	Mic center MIX signal for multi CH AV-1/audio DSP switch (front L/R data)
108	PK7/TOT3	AOSEL0	-	AV1 output AOD and AO0 switch
109	VCC3	V+3.3D	-	Power supply
110	VCC2	V+2.5D	-	Power supply
111	PJ0/INT0	XINT0	I	
112	PJ1/INT1	XINT1	I	
113	PJ2/INT2	XIRQ10	I	MY chip interrupt #0
114	PJ3/INT3	XIRQ11	I	MY chip interrupt #1
115	PJ4/INT4	XABUSY	I	Busy signal of DSP process operation "L"
116	PJ5/INT5	THLD	I	Playback speed monitoring signal
117	PJ6/INT6	SBSY	I	Sync. signal of subcode block (period SO+SI "H")
118	PJ7/INT7	N.C.	I	N.C.
119	PI0/SI0	SSI	I	Serial bus data input
120	PI1/SO0	SSO	O	Serial bus data output
121	PI2/SCK0	SSCK	I	Serial bus clock input
122	PI3/SI1	RXD	I	RS-232C RXD
123	PI4/SO1	TXD	O	RS-232C TXD
124	PI5/SCK1	SELMOD	-	Audio DSP mode switch
125	PH0/SI2	RESET2	-	Reset for DSP 2
126	PH1/SO2	XCSADSP1	O	CS for DSP 2
127	PH2/SCK2	XCSSPD	-	Latch signal of serial/parallel IC for generating audio DSP control signal
128	MD0	GND	-	Ground
129	MD1	GND	-	
130	MD2	GND	-	
131	VSS	GND	-	Ground
132	VCC2	V+2.5D	-	Power supply
133	VSS	GND	-	Ground
134	X1	EXTAL	O	
135	X0	XTAL	I	
136	VCC3	V+3.3D	-	Power supply
137	PC0/DREQ2	LFEON RESET1	O	Select Mix to front L/R of LFE element DSP 1 reset
138	PC1/DACK2	XMICON1 AV1/XSDSP	O	Mic front L/R MIX signal for 2 ch AV-1/servo DSP switch
139	PC2/DEOP2	6CHMD	O	DAC output 2 ch/6 ch switch (←XDVRST2)
140	PB0/DREQ0	XDREQ0	I	DMA response output to BY Chip
141	PB1/DACK0	DACK0	O	DMA request input from BY Chip
142	PB2/DEOP0	N.C.	-	N.C.
143	PB3/DREQ1	XDREQ1	I	DMA response output to AV-1 Chip
144	PB4/DACK1	XDACK1	O	DMA request input from AV-1 Chip
145	PB5/DEOP1	XEXCKON	O	ON/OFF switch of DSP external clock
146	PB6/IOWRX	DOISEL1	O	Digital output switch 1 of audio DSP (AV-1. DSP and GND)
147	PB7/IORDX	DOISEL2	O	Digital output switch 2 of audio DSP (AV-1. DSP and GND)
148	VSS	GND	-	Ground
149	PA0/CSOX	XCS20	O	Chip select output to Flash ROM
150	PA1/CS1X	XCS6	O	AV-1 Chip select



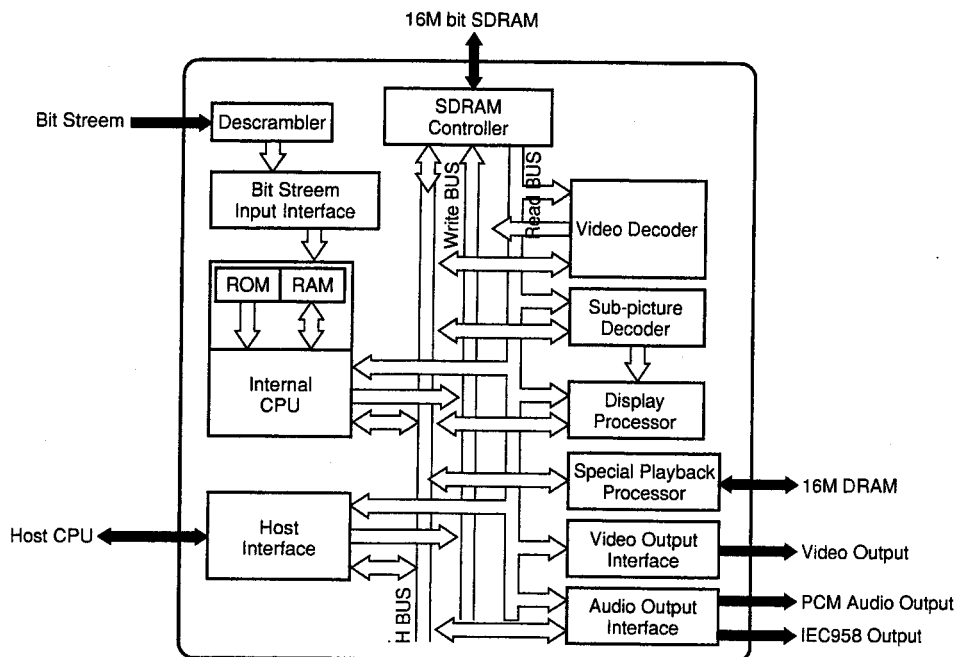
No.	Mark	Pin Name	I/O	Pin Function
151	PA2/CS2X	XCS3	O	Chip select of PD4995A (MY Chip)
152	PA3/CS3X	XCS4	O	Chip select of servo DSP
153	PA4/CS4X	XCS23	O	Chip select output to SRAM (1M)
154	PA5/CS5X	N.C.	O	N.C.
155	PA6/CS6X	N.C.	O	N.C.
156	PA7/CS7X	N.C.	O	N.C.
157	VCC3	V+3.3D	-	Power supply
158	VCC2	V+2.5D	-	Power supply
159	NMIX	-	-	V+3.3D fixed
160	HSTX	-	-	V+2.5D fixed
161	INITX	XINIT	I	
162	P80/RDY	RDY	I	
163	P81/BGRNTX	XAMUTE	I	Final stage mute of 2 ch audio output
164	P82/BRQ	XMMUTE	O	Audio multi channel mute
165	P83/RDX	XRD	O	
166	P84/WR0X	XWR0	O	
167	P85/WR1X	XWR1	O	
168	VSS	GND	-	Ground
169	P90/SYSCLK	SYSCLK	O	
170	P91	DFRST	-	DAC reset (for front L/R)
171	P92/MCLK	DFRST1	-	DAC reset (for center, surround and LFE)
172	P93	XCSDFO	O	DAC chip select ( $\leftarrow$ XLAT3)
173	P94/LBAX	XCSDF1	O	DAC chip select for center, surround and LFE
174	P95/BAAX	XAQRST	O	AQE reset
175	P96	XCSAQE	O	AQE chip select
176	P97/WEX	TM ENT	I	Test mode entry



# DV-47A, DV-S733A, DV-747A

## ■ M65774BFP (DVDM ASSY : IC801)

- MPEG2 Decoder IC
- Block Diagram



## • Pin Function

No.	Pin Name	I/O	Pin Function	No.	Pin Name	I/O	Pin Function
1	GND	I	Ground	21	5VDD	I	5V power supply
2	HD0	I/O	Data input and output port	22	HD15	I/O	Data input and output port
3	HD1			23	CS	I	Chip select signal input
4	HD2			24	RE	I	Read Enable signal input
5	HD3			25	WE	I	Write Enable signal input
6	HD4			26	BHE	I	Byte High Enable signal input
7	5VDD	I	5V power supply	27	RDY	O	Acknowledge signal which is indicated the finish of data reading or writing via the host bus
8	VDD	I	Power supply	28	INTR	O	Interrupt request signal against to the external CPU from M65773FP
9	HD5	I/O	Data input and output port	29	GND	I	Ground
10	HD6			30	HA0	I	Address input port
11	HD7			31	HA1		
12	HD8			32	HA2		
13	HD9			33	HA3		
14	GND	I	Ground	34	HA4		
15	HD10	I/O	Data input and output port	35	VDD	I	Power supply
16	HD11			36	5VDD	I	5V power supply
17	HD12			37	HA5	I	Address input port
18	HD13			38	HA6		
19	HD14			39	HA7		
20	VDD	I	Power supply	40	HA8		



No.	Pin Name	I/O	Pin Function	No.	Pin Name	I/O	Pin Function
41	HA9	I	Address input port	83	VDD	I	Power supply
42	GND	I	Ground	84	VSYN	O	Vertical sync. signal output
43	CDMCK	I	Connect to ground	85	HSYN	O	Horizontal sync. signal output
44	CDLRCK	I	L/R clock input from CDDSP	86	PICSTR		
45	CDBCK	I	PCM bit clock input from CDDSP	87	MBSTR		
46	CDDATA	I	Digital audio interface input	88	MBDATA		
47	VDD	I	Power supply	89	GND	I	Ground
48	CDDIN	I	PCM audio data input from CDDSP	90	PWD	O	Phase comparator output for external sync. operation
49	INT2	O	Interrupt request signal against to the external CPU from M65773FP	91	CSYN	I	Composite SYNC signal input
50	INT3			92	OSDKEY	O	OSD key flag output
51	DREQ	O	DMA request signal for OSD bitmap transfer	93	PXCLK	O	Pixel clock (27MHz free-running clock)
52	DACK	I	DMA acknowledge signal for OSD bitmap transfer	94	VDD	I	Power supply
53	GND	I	Ground	95	PD7	O	Digital pixel data
54	CLKO	O	27MHz clock output	96	PD6		
55	CLKIN	I	System clock input	97	PD5		
56	AVDD1	I	Analog power supply	98	PD4		
57	AGND1	I	Analog ground	99	GND	I	Ground
58	AGND3			100	PD3	O	Digital pixel data
59	AVDD3	I	Analog power supply	101	PD2		
60	CCAP	I	Connect to ground	102	PD1		
61	AGND2	I	Analog ground	103	PD0		
62	AVDD2	I	Analog power supply	104	VDD	I	Power supply
63	ACLKO	-	Open	105	GND	I	Ground
64	ACLKI	I	Audio clock input	106	RESET	I	Hardware reset input
65	HMODE1	I	Setting pin of host interface operating mode	107	TEST0	I	Connect to ground normally
66	GND	I	Ground	108	TEST1		
67	VDD	I	Power supply	109	TEST2		
68	AOD	O	PCM output of audio data	110	VDD	I	Power supply
69	AO2			111	NMD0	I/O	Data transfer line with DRAM
70	AO1			112	NMD15		
71	AO0			113	NMD1		
72	GND	I	Ground	114	NMD14		
73	DOUT1	O	Digital audio interface output	115	GND	I	Ground
74	DOUT0			116	NMD2	I/O	Data transfer line with DRAM
75	SDA	-	Open	117	NMD13		
76	SCL	-	Open	118	NMD3		
77	VDD	I	Power supply	119	NMD12		
78	GND	I	Ground	120	VDD	I	Power supply
79	DACCLK	O	Over-sampling operating clock output	121	NMD4	I/O	Data transfer line with DRAM
80	DOCLK	O	PCM bit clock output	122	NMD11		
81	LRCLK	O	Clock output for discriminating the channel (L/R) of PCM audio data	123	NMD5		
82	HMODE0	I	Setting pin of host interface operating mode	124	NMD10		



# DV-47A, DV-S733A, DV-747A

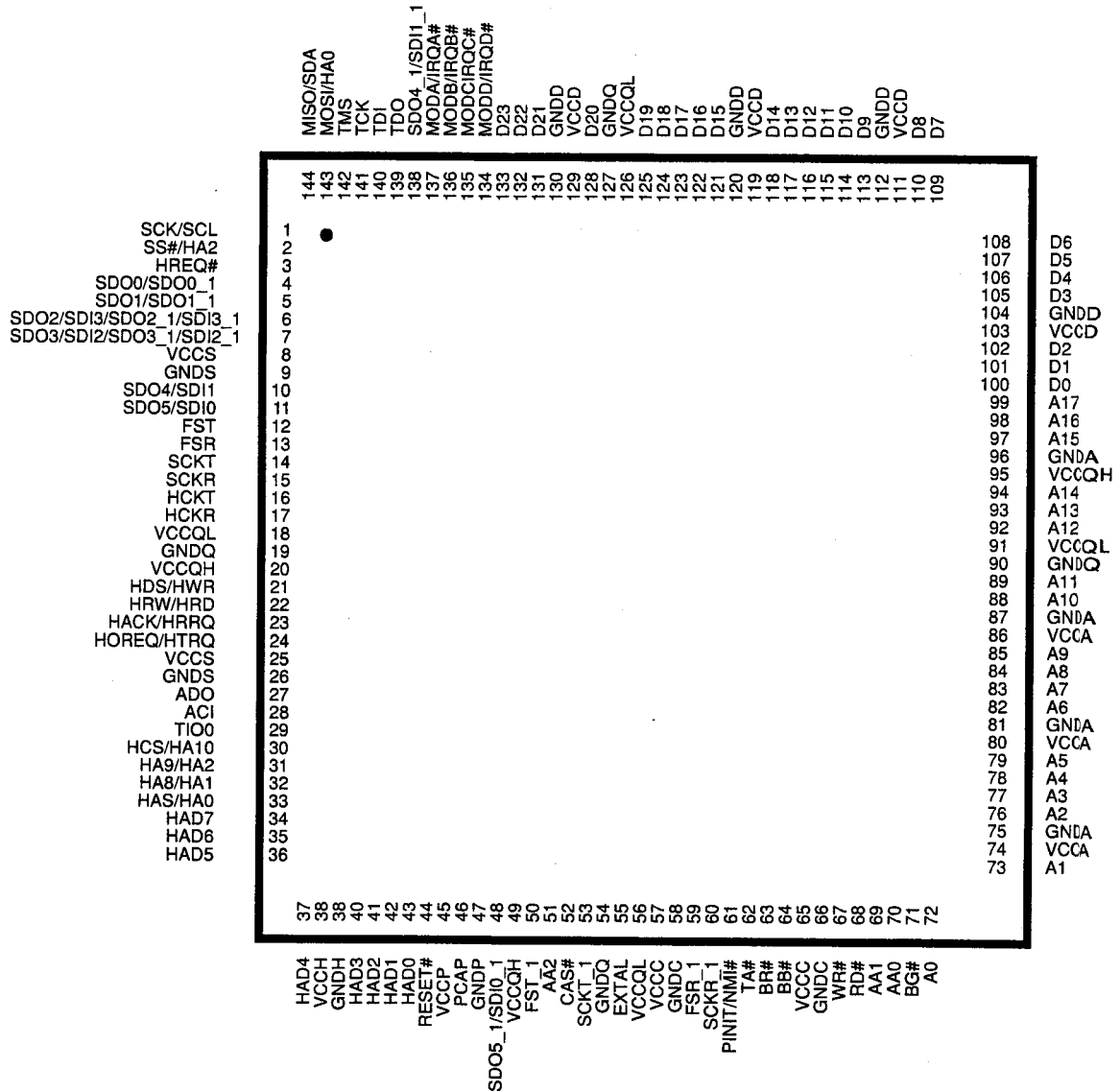
No.	Pin Name	I/O	Pin Function	No.	Pin Name	I/O	Pin Function
125	GND	I	Ground	167	MA5	O	Address line with SDRAM
126	NMD6	I/O	Data transfer line with DRAM	168	GND	I	Ground
127	NMD9			169	MA1	O	Address line with SDRAM
128	NMD7			170	MA6		
129	NMD8			171	MA0		
130	VDD	I	Power supply	172	MA7		
131	NCAS0	O	CAS (Column Address Strobe) control line of DRAM	173	VDD	I	Power supply
132	NWE	O	WE control line of DRAM	174	MA10	O	Address line with SDRAM
133	NCAS1	O	CAS (Column Address Strobe) control line of DRAM	175	MA8		
134	NRAS	O	RAS (Row Address Strobe) control line of DRAM	176	MA11		
135	GND	I	Ground	177	MA9		
136	NMA9	O	Address line with DRAM	178	GND	I	Ground
137	NMA8			179	DCS	O	Chip select of SDRAM
138	VDD	I	Power supply	180	RAS	O	RAS (Row Address Strobe) control line of SDRAM
139	NMA0	O	Address line with DRAM	181	CAS	O	CAS (Column Address Strobe) control line of SDRAM
140	NMA7			182	VDD	I	Power supply
141	NMA1			183	MCLK	O	Operation clock of SDRAM
142	NMA6			184	GND	I	Ground
143	GND	I	Ground	185	DWE	O	WE control line of SDRAM
144	NMA2	O	Address line with DRAM	186	DQMU	O	DQM control line of SDRAM Use for mask of upper byte output.
145	NMA5			187	DQML	O	DQM control line of SDRAM Use for mask of lower byte output.
146	NMA3			188	VDD	I	Power supply
147	NMA4			189	MD7	I/O	Data transfer line with SDRAM
148	VDD	I	Power supply	190	MD8		
149	BD7	I	Bit stream input port	191	MD6		
150	BD6			192	MD9		
151	GND	I	Ground	193	GND	I	Ground
152	BD5	I	Bit stream input port	194	MD5	I/O	Data transfer line with SDRAM
153	BD4			195	MD10		
154	BD3			196	MD4		
155	BD2			197	MD11		
156	VDD	I	Power supply	198	VDD	I	Power supply
157	GND	I	Ground	199	MD3	I/O	Data transfer line with SDRAM
158	BD1	I	Bit stream input port	200	MD12		
159	BD0			201	MD2		
160	BCLK	I	Strobe signal (clock) of BD port	202	MD13		
161	BDEN	I	Indicates the effective or invalid data which is sampled from BD port	203	GND	I	Ground
162	BDREQ	O	Output permission signal against to the device (channel decoder) which connecting to BD port	204	MD1	I/O	Data transfer line with SDRAM
163	VDD	I	Power supply	205	MD14		
164	MA3	O	Address line with SDRAM	206	MD0		
165	MA4			207	MD15		
166	MA2			208	VDD	I	Power supply



# ■ XCA56367PV150 (DVDM ASSY : IC901)

• DVD-Audio decoder

## • Pin Arrangement





# DV-47A, DV-S733A, DV-747A

## ● Pin Function

No.	Pin Name	I/O	Function
1	SCK	I	A clock for host serial communication
2	SS	I	for serial communication
3	HREQ#	O	SHI transfer permission information
4	SD00	O	ESAI Lf/Rf, L/R 2ch data output
5	SD01	O	ESAI Ls/Rs, (surround system data) output
6	SD02	O	ESAI center /Lfe output
7	SD03	O	N.C.
8	VCCS	-	ESSI, SCI, Timer Power
9	GNDS	-	ESSI, SCI, Timer GND
10	SDI1	I	N.C.
11	SD05	O	down mixture output
12	FST	I/O	LRCK input/output
13	FSR	O	N.C.
14	SCKT	I/O	BCK input/output
15	SCKR	-	N.C.
16	HCKT	I	HCK input
17	HCKR	O	N.C.
18	VCCQL	-	Quiet Core Power 1.8V
19	GNDQ	-	Quiet GND
20	VCCQH	-	Quiet External Power
21	HDS	I	Data strike rope from MyChip
22	HRW	I	Port which selects a data transfer course between Digital Signal Processor as MyChip
23	HACK	O	GPIO output (for error notice to a microcomputer)
24	HOREQ	O	GPIO output (a request to SCRUT)
25	VCCS	-	ESSI, SCI, Timer Power
26	GNDS	-	ESSI, SCI, Timer GND
27	ADO	O	DAX data output
28	ACI	I	A clock for DAX
29	TIO0	O	SHI transfer permission information
30	HCS	O	GPIO output (decode buffer full information) GPIO output (Digital Signal Processor active state information)
31	HA2	I	Host Address Input 2
32	HA1	I	Host Address Input 1
33	HA0	I	Host Address Input 0
34	HAD7	I	Address/Data Bus
35	HAD6		
36	HAD5		



No.	Pin Name	I/O	Function
37	HAD4	I	Address/Data Bus
38	VCCH	-	Host Power
39	GNDH	-	Host GND
40	HAD3	I	Address/Data Bus
41	HAD2		
42	HAD1		
43	HAD0		
44	RESET	I	RESET
45	VCCP	-	PLL POWER
46	PCAP	I	Capacitor connection for PLL loop filter
47	GNDP	-	PLL GND
48	SDI0_1	I	Ls/Rs input
49	VCCQH	-	Quiet External Power
50	FST_1	I	LRCK
51	AA2	O	Chip select for memory
52	CAS	O	N.C.
53	SCKT_1	I	BCK
54	GNDQ	-	Quiet GND
55	EXTAL	I	27MHz clock
56	VCCQL	-	Quiet Core Power
57	VCCC	-	Bus Control Power
58	GNDC	-	Bus Control GND
59	FSR_1	-	N.C.
60	SCKR_1	-	N.C.
61	PINT	I	PLL Intial
62	TA	I	N.C.
63	BR	O	
64	BB	I	N.C.
65	VCCC	-	
66	GNDC	-	Bus Control GND
67	WR	O	Wright signal for memory
68	RD	O	Read signal for memory
69	AA1	O	N.C.
70	AA0	O	
71	BG	I	
72	A0	O	Address Bus



# DV-47A, DV-S733A, DV-747A

No.	Pin Name	I/O	Function
73	A1	O	Address Bus
74	VCCA	–	Address Bus Power
75	GNDA	–	Address Bus GND
76	A2	O	Address Bus
77	A3		
78	A4		
79	A5		
80	VCCA	–	Address Bus Power
81	GNDA	–	Address Bus GND
82	A6	O	Address Bus
83	A7		
84	A8		
85	A9		
86	VCCA	–	Address Bus Power
87	GNDA	–	Address Bus GND
88	A10	O	Address Bus
89	A11		
90	GNDQ	–	Quiet GND
91	VCCQL	–	Quiet Core Power 1.8V
92	A12	O	Address Bus
93	A13		
94	A14		
95	VCCQH	–	Quiet External Power
96	GNDA	–	Address Bus GND
97	A15	O	Address Bus
98	A16		
99	A17		
100	D0	I/O	Data Bus
101	D1		
102	D2		
103	VCCD	–	Data Bus Power
104	GNDD	–	Data Bus GND
105	D3	I/O	Data Bus
106	D4		
107	D5		
108	D6		



No.	Pin Name	I/O	Function
109	D7	I/O	Data Bus
110	D8		
111	VCCD	–	Data Bus Power
112	GNDD	–	Data Bus GND
113	D9	I/O	Data Bus
114	D10		
115	D11		
116	D12		
117	D13		
118	D14		
119	VCCD	–	Data Bus Power
120	GNDD	–	Data Bus GND
121	D15	I/O	Data Bus
122	D16		
123	D17		
124	D18		
125	D19		
126	VCCQL	–	Quiet Core Power 1.8V
127	GNDQ	–	Quiet GND
128	D20	I/O	Data Bus
129	VCCD	–	Data Bus Power
130	GNDD	–	Data Bus GND
131	D21	I/O	Data Bus
132	D22		
133	D23		
134	MODD	I	Mode of operation choice
135	MODC		
136	MODB		
137	MODA		
138	SDI1_1	I	C/Lfe input
139	TDO	O	JTAG Test Data Output
140	TDI	I	JTAG Test Data Input
141	TCK	I	JTAG Test Clock
142	TMS	I	JTAG Test Mode Select
143	MOSI	I	SH serial data input
144	MOSO	O	SH serial data output

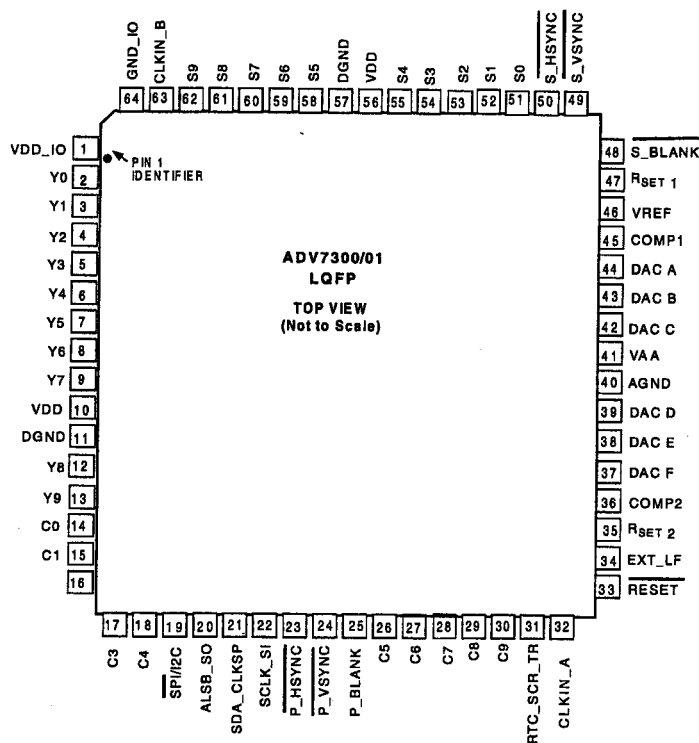


# DV-47A, DV-S733A, DV-747A

## ■ ADV7300KST (AVJB ASSY : IC601)

• Video Encoder IC

### • Pin Arrangement



### • Pin Function

Pin	Mnemonic	Input/Output	Function
DGND	G		Digital Ground
AGND	G		Analog Ground
GND_IO	G		Digital Ground
CLKIN_B	I		Pxel Clock Input. Requires a 27MHz reference clock for Progressive Scan Mode or a 74.25MHz (74.1758MHz) reference clock in HDTV mode. This clock input pin is only used in simultaneous SD and HD mode.
CLKIN_A	I		Pxel Clock Input for HD only or SD only modes.
COMP	O		Compensation Pin for DACs. Connect 0.1μF Capacitor from COMP pin to V <sub>AA</sub> .
DAC A	O		CVBS/ GREEN/ Y SD analog output.
DAC B	O		Luma/ BLUE/ U SD analog output.
DAC C	O		Chroma/ RED/ V SD analog output.
DAC D	O		in SD only mode: CVBS/GREEN/ Y analog output in HD only mode and simultaneous HD/SD : Y/ GREEN (HD) analog output.
DAC E	O		in SD only mode: Luma/BLUE/ U analog output in HD only mode and simultaneous HD/SD : Pr/ RED (HD) analog output.



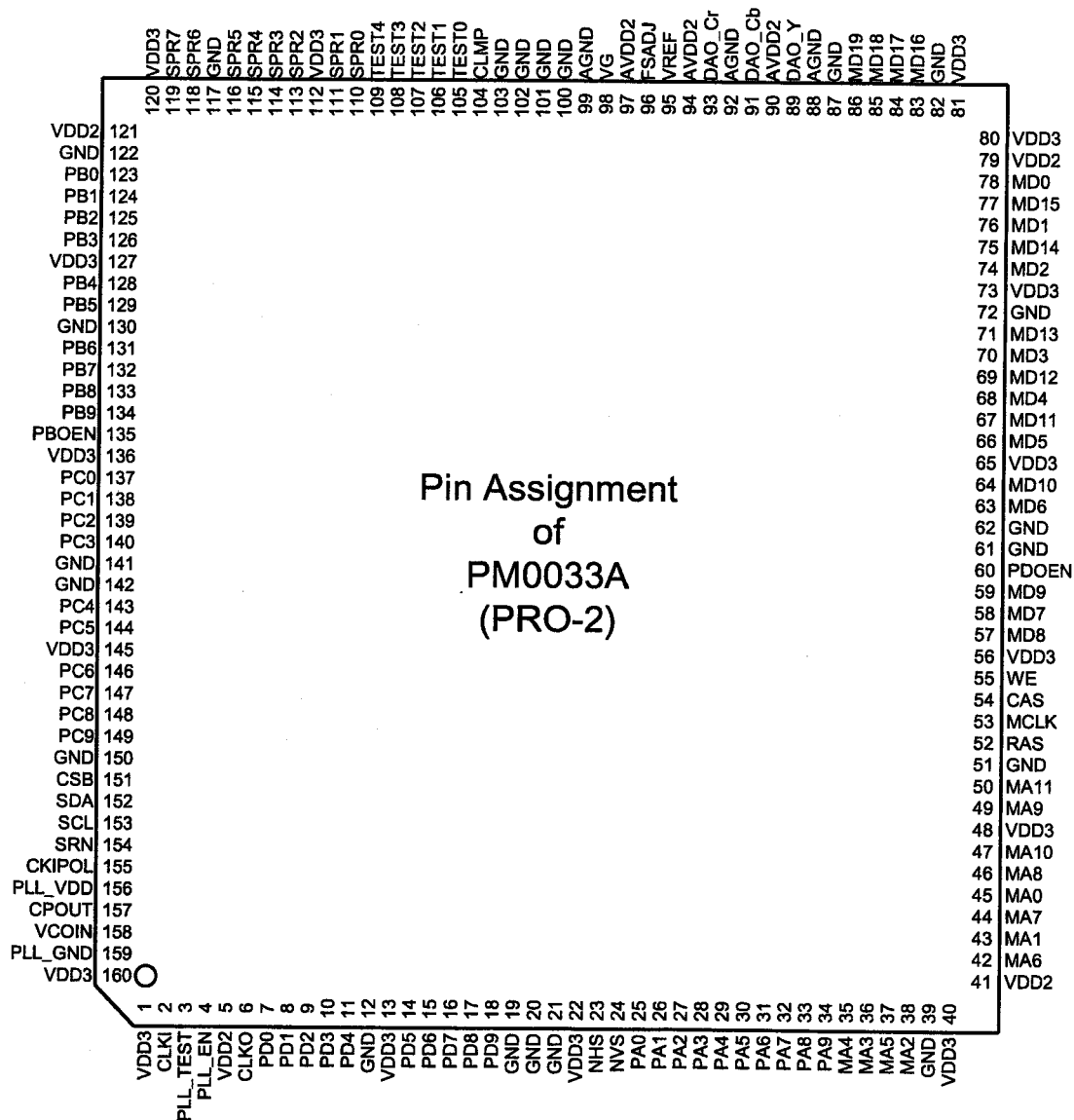
Pin	Mnemonic	Input/Output	Function
DAC F	O		in SD only mode: Chroma/RED/ V analog output in HD only mode and simultaneous HD/SD : Pb/ BLUE (HD) analog output.
P_BLANK	I		Video Blanking Control Signal for HD sync in simultaneous SD/HD mode and HD only mode.
$\overline{P\_HSYNC}$	I		Video Horizontal Sync Control Signal for HD sync in simultaneous SD/HD mode and HD only mode.
$\overline{P\_VSYNC}$	I		Video Vertical Sync Control Signal for HD sync in simultaneous SD/HD mode and HD only mode.
$\overline{S\_BLANK}$	I/O		Video Blanking Control Signal for SD.
$\overline{S\_HSYNC}$	I/O		Video Horizontal Control Signal for SD. Option to o/p SD HSYNC or HD HSYNC in SD Slave Mode 0 and/or any HD mode.
$\overline{S\_VSYNC}$	I/O		Video Blanking Control Signal for SD. Option to o/p SD VSYNC or SD HSYNC in SD Slave Mode 0 and/or any HD mode.
C9-0	I		10-Bit Progressive scan/ HDTV input port for CrCb color data in 4:2:2 input mode. In 4:4:4 input mode this input port is used for the Cb [Blue/U] data. The LSBs are set up on pins C0, C1. In default mode the input on this port is output on DAC E.
Y9-0	I		10-Bit Progressive scan/ HDTV input port for Y data. The LSBs are set up on pins Y0, Y1. In default mode the input on this port is output on DAC D.
S9-S0	I		10-Bit Standard Definition input port. Or Progressive Scan/ HDTV input port for Cr [Red/V] color data in 4:4:4 input mode. The LSBs are set up on pins S0, S1. In default mode the input on this port is output on DAC F.
$\overline{RESET}$	I		This input resets the on-chip timing generator and sets the ADV7300/01 into Default Register setting. Reset is an active low signal.
R <sub>SET1,2</sub>	I		A 1520 Ohms resistor must be connected from this pin to AGND and is used to control the amplitudes of the DAC outputs.
SCL_SI	I		Multifunctional input: MPU Port Serial Interface Clock Input or SPI input.
SDA_CLKSP	I/O		Multifunctional pin: MPU Port Serial Data Input/Output or SPI clock input.
ALSB_SO	I/O		Multifunctional pin. TTL Address Input. This signal sets up the LSB of the MPU address. When this pin is tied low the I2C filter is activated which reduces noise on the I2C interface. When this pin is tied high, the input bandwidth on the I2C lines is increased. SPI output.
$\overline{SPI/I2C}$	I		When this input pin is brought low, the ADV7300/01 interfaces over the SPI port and uses this input as part of the 4 wire SPI interface. When this input pin is tied high [Vdd_IO], the ADV7300/01 interfaces over the I2C port.
V <sub>DD_IO</sub>	P		Digital power supply
V <sub>DD</sub>	P		Digital power supply
V <sub>AA</sub>	P		Analog power supply
V <sub>REF</sub>	I/O		Optional External Voltage Reference Input for DACs or Voltage Reference Output (1.235V).
EXT_LF	I		External Loop filter for the internal PLL.
RTC_SCR_TR	I		Multifunctional Input: Real Time Control (RTC) input, Timing Reset input, Subcarrier Reset input.



DV-47A, DV-S733A, DV-747A

PM0033A (AVJB ASSY : IC901)

- Progressive Scan Converter (PRO2)
- Pin Arrangement





## • Pin Function

Pin No.	Name	I/O/P	Attribute	Functional Description
1	VDD3	P	-	VDD for IO (3.3V)
2	CLKI	In	LVTTL	27MHz System clock input terminal
3	PLL_TEST	In	LVTTL	Test exclusive use input terminal
4	PLL_EN	In	LVTTL	PLL enable input terminal
5	VDD2	P	-	VDD for Core (2.5V)
6	CLKO	Out	2mA	27MHz Clock output terminal
7	PD0	Inout	LVTTL, leakage, 2mA	Image data I/O port D(LSB)
8	PD1	Inout	LVTTL, leakage, 2mA	Image data I/O port D
9	PD2	Inout	LVTTL, leakage, 2mA	Image data I/O port D
10	PD3	Inout	LVTTL, leakage, 2mA	Image data I/O port D
11	PD4	Inout	LVTTL, leakage, 2mA	Image data I/O port D
12	GND	P	-	Digital Ground
13	VDD3	P	-	VDD for IO (3.3V)
14	PD5	Inout	LVTTL, leakage, 2mA	Image data I/O port D
15	PD6	Inout	LVTTL, leakage, 2mA	Image data I/O port D
16	PD7	Inout	LVTTL, leakage, 2mA	Image data I/O port D
17	PD8	Inout	LVTTL, leakage, 2mA	Image data I/O port D
18	PD9	Inout	LVTTL, leakage, 2mA	Image data I/O port D(MSB)
19	GND	P	-	Digital Ground
20	GND	P	-	Digital Ground
21	GND	P	-	Digital Ground
22	VDD3	P	-	VDD for IO (3.3V)
23	NHS	In	Schmitt	Horizontal synchronization input terminal
24	NVS	In	Schmitt	Vertical synchronization input terminal
25	PA0	In	LVTTL	Image data I/O port A(LSB)
26	PA1	In	LVTTL	Image data I/O port A
27	PA2	In	LVTTL	Image data I/O port A
28	PA3	In	LVTTL	Image data I/O port A
29	PA4	In	LVTTL	Image data I/O port A
30	PA5	In	LVTTL	Image data I/O port A
31	PA6	In	LVTTL	Image data I/O port A
32	PA7	In	LVTTL	Image data I/O port A
33	PA8	In	LVTTL	Image data I/O port A
34	PA9	In	LVTTL	Image data I/O port A(MSB)
35	MA4	Out	2mA	SDRAM address output terminal
36	MA3	Out	2mA	SDRAM address output terminal
37	MA5	Out	2mA	SDRAM address output terminal
38	MA2	Out	2mA	SDRAM address output terminal
39	GND	P	-	Digital Ground
40	VDD3	P	-	VDD for IO (3.3V)



# DV-47A, DV-S733A, DV-747A

Pin No.	Name	I/O/ P	Attribute	Functional Description
41	VDD2	P	-	VDD for Core (2.5V)
42	MA6	Out	2mA	SDRAM address output terminal
43	MA1	Out	2mA	SDRAM address output terminal
44	MA7	Out	2mA	SDRAM address output terminal
45	MA0	Out	2mA	SDRAM address output terminal(LSB)
46	MA8	Out	2mA	SDRAM address output terminal
47	MA10	Out	2mA	SDRAM address output terminal
48	VDD3	P	-	VDD for IO (3.3V)
49	MA9	Out	2mA	SDRAM address output terminal
50	MA11	Out	2mA	SDRAM address output terminal(MSB)
51	GND	P	-	Digital Ground
52	RAS	Out	2mA	SDRAM Row Address Strobe Command output terminal
53	MCLK	Out	4mA	SDRAM Clock output terminal (54MHz)
54	CAS	Out	2mA	SDRAM Column Address Strobe Command output terminal
55	WE	Out	2mA	SDRAM Write Enable output terminal
56	VDD3	P	-	VDD for IO (3.3V)
57	MD8	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
58	MD7	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
59	MD9	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
60	PDOEN	In	LVTTL	Image port D input and output setting input terminal (L: input, H: output )
61	GND	P	-	Digital Ground
62	GND	P	-	Digital Ground
63	MD6	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
64	MD10	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
65	VDD3	P	-	VDD for IO (3.3V)
66	MD5	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
67	MD11	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
68	MD4	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
69	MD12	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
70	MD3	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
71	MD13	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
72	GND	P	-	Digital Ground
73	VDD3	P	-	VDD for IO (3.3V)
74	MD2	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
75	MD14	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
76	MD1	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
77	MD15	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
78	MD0	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal(LSB)
79	VDD2	P	-	VDD for Core (2.5V)
80	VDD3	P	-	VDD for IO (3.3V)
81	VDD3	P	-	VDD for IO (3.3V)
82	GND	P	-	Digital Ground
83	MD16	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal



Pin No.	Name	I/O/ P	Attribute	Functional Description
84	MD17	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
85	MD18	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal
86	MD19	Inout	LVTTL, 2mA, Pullup	SDRAM data input-output terminal(MSB)
87	GND	P	-	Digital Ground
88	AGND	P	-	Ground for DAC
89	DAO_Y	Out	-	Analog video-out (Y)
90	AVDD2	P	-	VDD for DAC (2.5V)
91	DAO_Cb	Out	-	Analog video-out (Cb)
92	AGND	P	-	Ground for DAC
93	DAO_Cr	Out	-	Analog video-out (Cr)
94	AVDD2	P	-	VDD for DAC (2.5V)
95	VREF	In	-	DAC reference voltage input terminal
96	FSADJ	Inout	-	An ohms connection terminal for DAC peak swing setting
97	AVDD2	P	-	VDD for DAC (2.5V)
98	VG	Out	-	A volume connection terminal for gate voltage compensation of a DAC electric current cell
99	AGND	P	-	Ground for DAC
100	GND	P	-	Digital Ground
101	GND	P	-	Digital Ground
102	GND	P	-	Digital Ground
103	GND	P	-	Digital Ground
104	CLMP	Out	2mA	Clamp pulse output terminal
105	TEST0	In	LVTTL	Test exclusive use input terminal
106	TEST1	In	LVTTL	Test exclusive use input terminal
107	TEST2	In	LVTTL	Test exclusive use input terminal
108	TEST3	In	LVTTL	Test exclusive use input terminal
109	TEST4	In	LVTTL	Test exclusive use input terminal
110	SPR0	Out	2mA	Serial-to-parallel conversion output terminal(LSB)
111	SPR1	Out	2mA	Serial-to-parallel conversion output terminal
112	VDD3	P	-	VDD for IO (3.3V)
113	SPR2	Out	2mA	Serial-to-parallel conversion output terminal
114	SPR3	Out	2mA	Serial-to-parallel conversion output terminal
115	SPR4	Out	2mA	Serial-to-parallel conversion output terminal
116	SPR5	Out	2mA	Serial-to-parallel conversion output terminal
117	GND	P	-	Digital Ground
118	SPR6	Out	2mA	Serial-to-parallel conversion output terminal
119	SPR7	Out	2mA	Serial-to-parallel conversion output terminal(MSB)
120	VDD3	P	-	VDD for IO (3.3V)
121	VDD2	P	-	VDD for Core (2.5V)
122	GND	P	-	Digital Ground
123	PB0	Inout	LVTTL, leakage, 2mA	Image data I/O port B(LSB)
124	PB1	Inout	LVTTL, leakage, 2mA	Image data I/O port B
125	PB2	Inout	LVTTL, leakage, 2mA	Image data I/O port B
126	PB3	Inout	LVTTL, leakage, 2mA	Image data I/O port B
127	VDD3	P	-	VDD for IO (3.3V)
128	PB4	Inout	LVTTL, leakage, 2mA	Image data I/O port B



# DV-47A, DV-S733A, DV-747A

Pin No.	Name	I/O/ P	Attribute	Functional Description
129	PB5	Inout	LVTTL, leakage, 2mA	Image data I/O port B
130	GND	P	-	Digital Ground
131	PB6	Inout	LVTTL, leakage, 2mA	Image data I/O port B
132	PB7	Inout	LVTTL, leakage, 2mA	Image data I/O port B
133	PB8	Inout	LVTTL, leakage, 2mA	Image data I/O port B
134	PB9	Inout	LVTTL, leakage, 2mA	Image data I/O port B(MSB)
135	PBOEN	In	LVTTL	Image port B input and output setting input terminal (L: input, H: output )
136	VDD3	P	-	VDD for IO (3.3V)
137	PC0	Out	2mA	Image data I/O port C(LSB)
138	PC1	Out	2mA	Image data I/O port C
139	PC2	Out	2mA	Image data I/O port C
140	PC3	Out	2mA	Image data I/O port C
141	GND	P	-	Digital Ground
142	GND	P	-	Digital Ground
143	PC4	Out	2mA	Image data I/O port C
144	PC5	Out	2mA	Image data I/O port C
145	VDD3	P	-	VDD for IO (3.3V)
146	PC6	Out	2mA	Image data I/O port C
147	PC7	Out	2mA	Image data I/O port C
148	PC8	Out	2mA	Image data I/O port C
149	PC9	Out	2mA	Image data I/O port C(MSB)
150	GND	P	-	Digital Ground
151	CSB	In	Schmitt	MPU Interface chip select input terminal
152	SDA	In	Schmitt	MPU Interface data entry terminal
153	SCL	In	Schmitt	MPU Interface clock input terminal
154	SRN	In	Schmitt	System reset input terminal
155	CKIPOL	In	LVTTL	System clock polarity setting input terminal
156	PLL_VDD	P	-	VDD of PLL exclusive use (2.5V)
157	CPOUT	Out	Analog	Analog output terminal from PLL charge pump
158	VCOIN	In	Analog	Analog input terminal from PLL outside charge account loop filter
159	PLL_GND	P	-	Ground of PLL exclusive use
160	VDD3	P	-	VDD for IO (3.3V)



# **■ PE5251A (FLIR ASSY : IC101)**

## **• Mode Control IC**

### **• Pin Function**

No.	Pin Name	I/O	Pin Function
1	VDD1	–	Positive power supply (excepting port, analog and FIP controller/driver section)
2	VSS1	–	Ground (excepting port and analog)
3	X1	I	Connect a crystal for main system clock oscillation
4	X2	–	
5	IC	–	Internal connection Connect to Vss1 directly.
6	RESET	I	System reset input
7	P27/SCK1	I/O	Port 2 8 bit input/output port / serial clock input/output
8	P26/SI1	I/O I	Port 2 8 bit input/output port / Serial data input
9	P25/SO1	I/O O	Port 2 8 bit input/output port / Serial data output
10	P24/BUSY	I/O I	Port 2 8 bit input/output port / Busy signal input
11	P23	I/O	Port 2 8 bit input/output port
12	P22		
13	P21/SO3	I/O O	Port 2 8 bit input/output port / Serial data output
14	P20/SCK3	I/O	Port 2 8 bit input/output port / serial clock input/output
15	P00/INTP0	I/O I	Port 0 3 bit input/output port / External interrupt request input
16	P01/INTP1		
17	P02/TI	I/O I	Port 0 3 bit input/output port / Timer input of 8 bit remote control timer (TM9)
18	AVSS	–	Ground of A/D converter
19	ANI3	I	Analog input of A/D converter
20	ANI2		
21	ANI1		
22	ANI0		
23	VSS0	–	Ground of port section
24	AVDD	–	Analog power supply of A/D converter / reference voltage input
25	VDD0	–	Positive power supply of port section
26	P64	I/O	Port 6 5-bit high proof pressure input/output ports of P-ch open drain
27	P63		
28	P62		
29	P61		
30	P60		
31	P57	I/O	Port 5 8-bit high proof pressure input/output ports of P-ch open drain
32	P56		
33	P55		
34	P54		
35	P53		
36	P52		
37	P51		
38	P50		
39	P47	O	Port 4 8-bit high proof pressure input/output ports of P-ch open drain
40	P46		



# DV-47A, DV-S733A, DV-747A

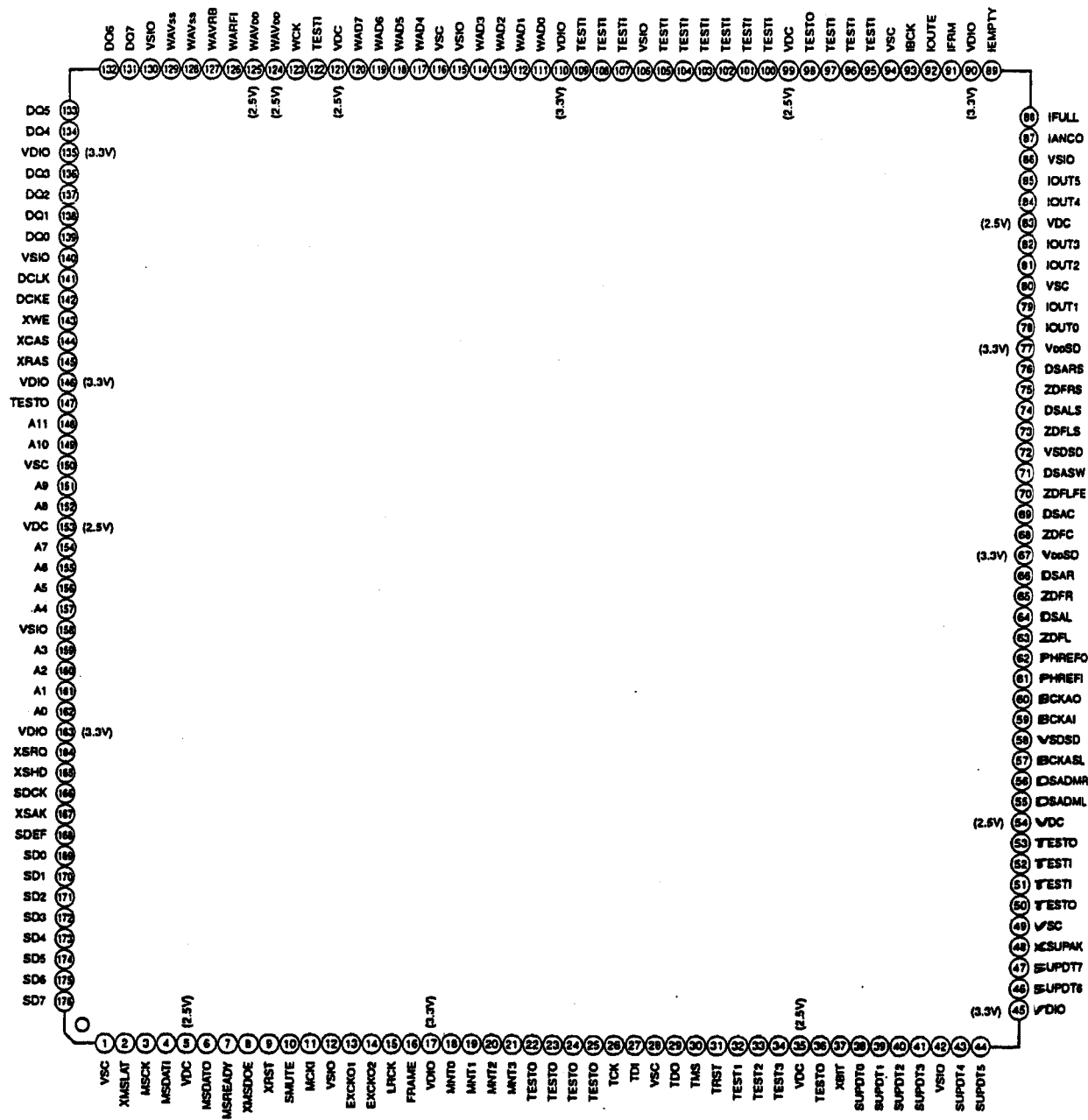
No.	Pin Name	I/O	Pin Function
41	P45	O	Port 4 8-bit high proof pressure input/output ports of P-ch open drain
42	P44		
43	P43/FIP35	O	Port 4 8-bit high proof pressure input/output ports of P-ch open drain / High proof pressure large current output of FIP controller/driver
44	P42/FIP34		
45	P41/FIP33		
46	P40/FIP32		
47	P37/FIP31	O	Port 3 8-bit high proof pressure input/output ports of P-ch open drain / High proof pressure large current output of FIP controller/driver
48	P36/FIP30		
49	P35/FIP29		
50	P34/FIP28		
51	P33/FIP27		
52	P32/FIP26		
53	P31/FIP25		
54	P30/FIP24		
55	FIP23	O	High proof pressure large current output of FIP controller/driver
56	FIP22		
57	FIP21		
58	FIP20		
59	VDD2	-	Positive power supply of FIP controller/driver section
60	VLOAD	-	Connect a pull-down resistor of FIP controller/driver
61	FIP19	O	High proof pressure large current output of FIP controller/driver
62	FIP18		
63	FIP17		
64	FIP16		
65	FIP15		
66	FIP14		
67	FIP13		
68	FIP12		
69	FIP11		
70	FIP10		
71	FIP9		
72	FIP8		
73	FIP7		
74	FIP6		
75	FIP5		
76	FIP4		
77	FIP3		
78	FIP2		
79	FIP1		
80	FIP0		



■ CXD2753R (SACD ASSY : IC801)

• SACD Decoder

• Pin Arrangement





# DV-47A, DV-S733A, DV-747A

## ● Pin Function

No.	Pin Name	I/O	Pin Function
1	VSC	-	Ground terminal for core
2	XMSLAT	I	Latched input terminal for microcomputer serial communication
3	MSCK		Shift clock input terminal for microcomputer serial communication
4	MSDAI		Data entry terminal for microcomputer serial communication
5	VDC	-	Power supply terminal for core
6	MSDATO	O	Data output terminal for microcomputer serial communication
7	MSREADY		Output preparation completion flag for microcomputer serial communication
8	XMSDOE		Output enable terminal for microcomputer serial communication
9	XRST	I	Reset terminal resets the whole IC with "L".
10	SMUTE	lpd	Software mute removes audio out with "L" with "H" a soft mute terminal.
11	MCKI	I	Master clock input terminal
12	VSIO	-	Ground terminal for I/O
13	EXCKO1	O	Outside output clock terminal 1
14	EXCKO2		Outside output clock terminal 2
15	LRCK		1Fs (44.1kHz) clock output terminal
16	FRAME		Frame signal output terminal
17	VDIO	-	Power supply terminal for I/O
18	MNT0	O	Monitor output terminal
19	MNT1		
20	MNT2		
21	MNT3		
22	TEST0		Output terminal for test
23			
24			
25			
26	TCK	I	It is fixation in "L" a clock input terminal for test.
27	TDI	lpu	Input terminal for test
28	VSC	-	Ground terminal for core
29	TDO	O	Output terminal for test
30	TMS	lpu	Input terminal for test
31	TRST		Reset terminal for test
32	TEST1	I	It is fixation in "L" a clock input terminal for test.
33	TEST2		
34	TEST3		
35	VDC	-	Power supply terminal for core
36	TEST0	O	Output terminal for test
37	XBIT		DST connection monitor terminal
38	SUPDT0		Supplementary data output terminal (LSB)
39	SUPDT1		Supplementary data output terminal
40	SUPDT2		
41	SUPDT3		
42	VSIO	-	Ground terminal for I/O
43	SUPDT4	O	Supplementary data output terminal
44	SUPDT5		
45	VDIO	-	Power supply terminal for I/O
46	SUPDT6	O	Supplementary data output terminal
47	SUPDT7		Supplementary data output terminal (MSB)
48	XSUPAK		Supplementary data output terminal
49	VSC	-	Ground terminal for core
50	TEST0	O	Output terminal for test



No.	Pin Name	I/O	Pin Function
51	TESTI	I	It is fixation in "L" a test input terminal.
52			
53	TESTO	O	Output terminal for test
54	VDC	-	Power supply terminal for core
55	DSADML	O	DSD data output terminal for Lch Down Mix
56	DSADMR		DSD data output terminal for Rch Down Mix
57	BCKASL	I	Input and output choice terminal of a 1 bit clock for DSD data output.L= input (slave), H = output (master).
58	VSDSD	-	Ground terminal for DSD data output
59	BCKAI	I	Bit clock input terminal for DSD data output
60	BCKAO	O	Bit clock output terminal for DSD data output
61	PHREFI	I	Phase reference signal input terminal for DSD output phase modulation
62	PHREFO	O	Phase reference signal output terminal for DSD output phase modulation
63	ZDFL		Zero Lch data search flag
64	DSAL		DSD data output terminal for Lch loud speaker
65	ZDFR		Zero Rch data search flag
66	DSAR		DSD data output terminal for Rch loud speaker
67	VDDSD		Power supply Mizuko for DSD data output
68	ZDFC	O	Zero Cch data search flag
69	DSAC		DSD data output terminal for Cch loud speaker
70	ZDFLFE		Zero LFEch data search flag
71	DSASW		DSD data output terminal for SWch loud speaker
72	VSDSD	-	Ground terminal for DSD data output
73	ZDFLS	O	Zero LSch data search flag
74	DSALS		DSD data output terminal child for LSch loud speaker
75	ZDFRS		Zero RSch data search flag
76	DSARS		DSD data output terminal for RSch loud speaker
77	VDDSD	-	Power supply Mizuko for DSD data output
78	IOUT0	O	Data output terminal 0 for IEEE1394 link tip I/F
79	IOUT1		Data output terminal 1 for IEEE1394 link tip I/F
80	VSC	-	Ground terminal for core
81	IOUT2	O	Data output terminal 2 for IEEE1394 link tip I/F
82	IOUT3		Data output terminal 3 for IEEE1394 link tip I/F
83	VDC	-	Power supply terminal for co
84	IOUT4	O	Data output terminal 4 for IEEE1394 link tip I/F
85	IOUT5		Data output terminal 5 for IEEE1394 link tip I/F
86	VSIO	-	Ground terminal for I/O
87	IANCO	O	Transmission information data output terminal for IEEE1394 link tip I/F
88	IFULL	I	Data transmission hold demand signal input terminal for IEEE1394 link tip I/F
89	IEMPTY		High speed transmission demand signal input terminal for IEEE1394 link tip I/F
90	VDIO	-	Power supply terminal for I/O
91	IFRM	O	Frame reference signal output Mizuko for IEEE1394 link tip I/F
92	IOUTE		Enable signal output terminal for IEEE1394 link tip I/F
93	IBCK		Data transmission clock output terminal for IEEE1394 link tip I/F
94	VSC	-	Ground terminal for core
95	TESTI	I	It is fixation in "H" a test input terminal.
96		I	It is fixation in "L" a test input terminal.
97		Ipu	It is fixation in "H" a test input terminal.
98	TESTO	O	Output terminal for test
99	VDC	-	Power supply terminal for co
100	TESTI	I	It is fixation in "L" a test input terminal.



# DV-47A, DV-S733A, DV-747A

No.	Pin Name	I/O	Pin Function
101	TESTI	I	It is fixation in "L" a test input terminal.
102			
103			
104			
105			
106	VSIO	-	Ground terminal for I/O
107	TESTI	I	It is fixation in "L" a test input terminal.
108			
109			
110	VDIO	-	Power supply terminal for I/O
111	WAD0	I	Outside A/D data entry terminal for PSP Physical Disc Mark search (LSB)
112	WAD1		Outside A/D data entry terminal for PSP Physical Disc Mark search
113	WAD2		
114	WAD3		
115	VSIO	-	Ground terminal for I/O
116	VSC	-	Ground terminal for core
117	WAD4	I	Outside A/D data entry terminal for PSP Physical Disc Mark search
118	WAD5		
119	WAD6		
120	WAD7		Outside A/D data entry terminal for PSP Physical Disc Mark search (MSB)
121	VDC	-	Power supply terminal for core
122	TESTI	I	It is fixation in "L" a test input terminal.
123	WCK		Movement clock for PSP Physical Disc Mark search
124	WAVDD	-	A/D power supply terminal for PSP Physical Disc Mark search
125			
126	WARFI	Ai	Analog RF signal input terminal for PSP Physical Disc Mark search
127	WAVRB		A/D bottom reference terminal for PSP Physical Disc Mark search
128	WAVSS	-	A/D ground terminal for PSP Physical Disc Mark search
129			
130	VSIO	-	Ground terminal for I/O
131	DQ7	I/O	SDRAM data input-output terminal (MSB)
132	DQ6		SDRAM data input-output terminal
133	DQ5		
134	DQ4		
135	VDIO	-	Power supply terminal for I/O
136	DQ3	I/O	SDRAM data input-output terminal
137	DQ2		
138	DQ1		
139	DQ0		SDRAM data input-output terminal (LSB)
140	VSIO	-	Ground terminal for I/O
141	DCLK	O	Clock output terminal for SDRAM
142	DCKE		Clock enable output terminal for SDRAM
143	XWE		Wright enable output terminal for SDRAM
144	XCAS		Column address strobe output terminal for SDRAM
145	XRAS		Row address strobe output terminal for SDRAM
146	VDIO	-	Power supply terminal for I/O
147	TEST0	O	Output terminal for test
148	A11		Address output terminal for SDRAM (MSB)
149	A10		Address output terminal for SDRAM
150	VSC	-	Ground terminal for core



No.	Pin Name	I/O	Pin Function
151	A9	O	Address output terminal for SDRAM
152	A8		
153	VDC	-	Power supply terminal for core
154	A7	O	Address output terminal for SDRAM
155	A6		
156	A5		
157	A4		
158	VSIO	-	Ground terminal for I/O
159	A3	O	Address output terminal for SDRAM
160	A2		
161	A1		Address output terminal for SDRAM (LSB)
162	A0		
163	VDIO	-	Power supply terminal for I/O
164	XSRQ	O	Data request output terminal to input into a front end processor
165	XSHD	I	Input terminal of a header flag output by a front end processor
166	SDCK		Input terminal of a data carrier clock output by a front end processor
167	XSAK		Input terminal of data partial response flag output by a front end processor
168	SDEF		Input terminal of error flag output by a front end processor
169	SD0		The stream data input terminal which is output by a front end processor (LSB)
170	SD1		The stream data input terminal which is output by a front end processor
171	SD2		
172	SD3		
173	SD4		
174	SD5		
175	SD6		
176	SD7		
			The stream data input terminal which is output by a front end processor (MSB)

Ipu : Pull-up input, Ipd : Pull-down input, Ai : Analog input

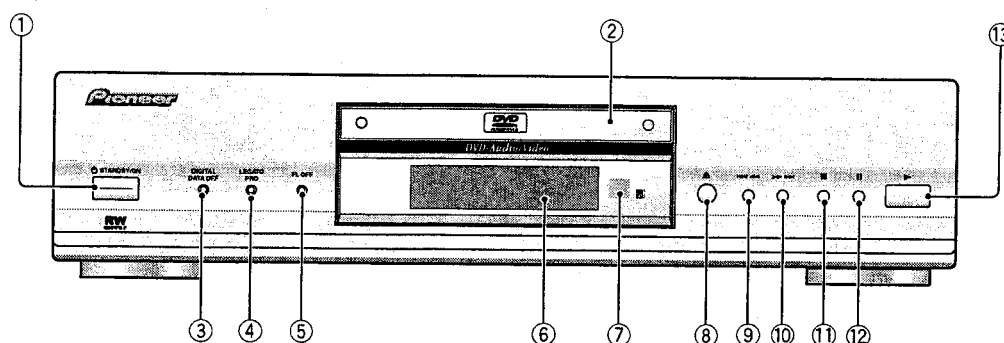


## 8. PANEL FACILITIES AND SPECIFICATIONS

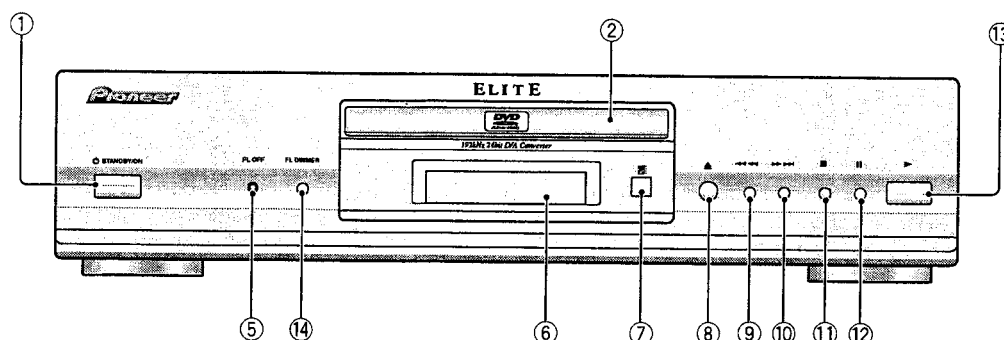
### 8.1 PANEL FACILITIES

#### 8.1.1 Front Panel

##### DV-S733A, DV-747A



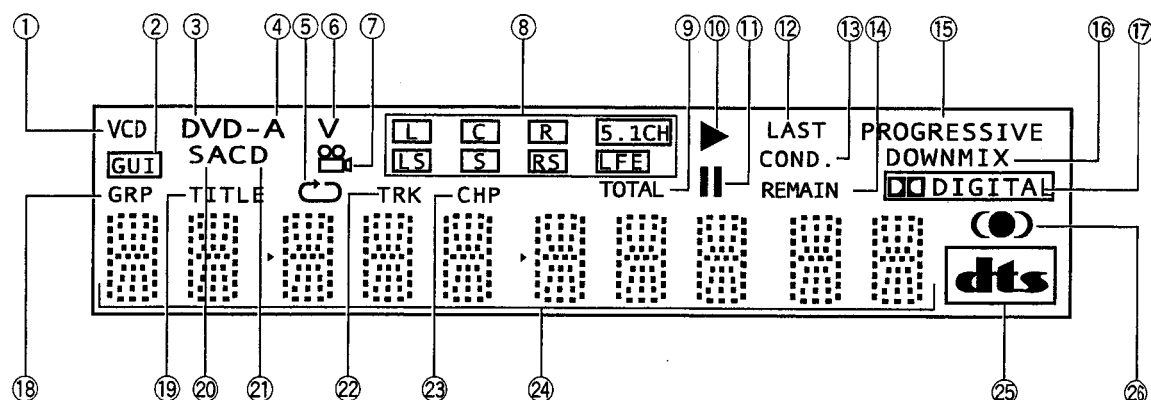
##### DV-47A



- |   |  |
|---|--|
| <p>1 <b>⏻ STANDBY/ON</b></p> <p>2 <b>Disc tray</b></p> <p>3 <b>DIGITAL DATA OFF indicator</b> – Switches the digital output on/off. When switched off, the indicator lights</p> <p>4 <b>LEGATO PRO indicator</b></p> <p>5 <b>FL OFF indicator</b> – Lights when the display is switched off using the <b>FL DIMMER</b> button</p> <p>6 <b>Display</b></p> | <p>7 <b>Remote control sensor</b></p> <p>8 <b>▲</b> – Disc tray open/close</p> <p>9 <b>◀◀◀</b> – Reverse scan/skip</p> <p>10 <b>▶▶▶</b> – Forward scan/skip</p> <p>11 <b>■</b> – Stop</p> <p>12 <b>⏸</b> – Pause</p> <p>13 <b>▶</b> – Play</p> <p>14 <b>FL DIMMER</b> – Press to change the display brightness</p> |
|---|--|



## 8.1.2 Display Window



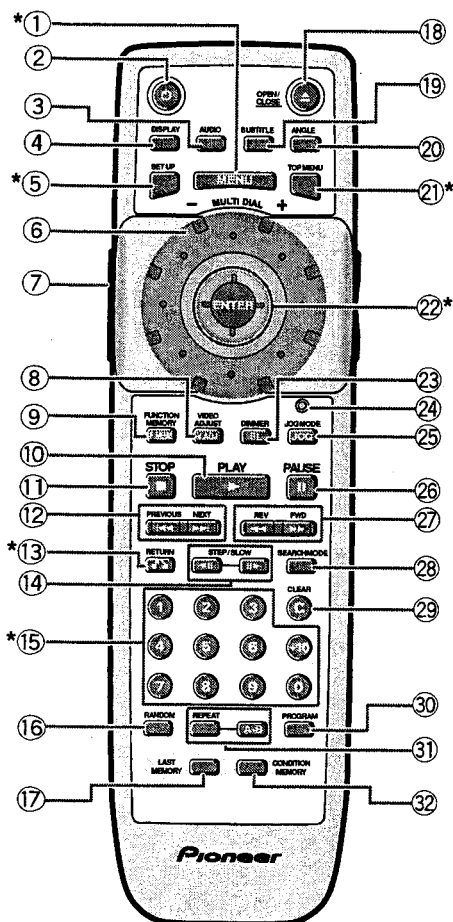
- 1 **VCD** – Lights when a Super VCD/Video CD is loaded
- 2 **GUI** – Lights when an on-screen menu is being displayed
- 3 **DVD** – Lights when a DVD is loaded
- 4 **DVD-A** – Lights when a DVD-Audio disc is playing
- 5 Lights during repeat play
- 6 **V** – Lights during playback of the video part of DVD discs
- 7 Lights during a multi-angle section of a DVD-Video disc
- 8 **L, C, R, LS, S, RS, LFE** – show which channels are recorded on the disc playing  
**5.1CH** – Lights when the audio output is set to 5.1 channel
- 9 **TOTAL** – Indicates that the time shown in the character display is the total playingtime of the disc
- 10 **▶** – Lights when a disc is playing
- 11 **||** – Lights when a disc is paused
- 12 **LAST** – Lights when the disc has a book-mark memory
- 13 **COND.** – Lights when the disc has had preferences set
- 14 **REMAIN** – Indicates that the time shown in the character display is the remaining playing time of the disc
- 15 **PROGRESSIVE** – Lights when unit is outputting 525 line progressive scan (non-interlaced) video. [except DV-747]
- 16 **DOWNMIX** – Lights when multi-channel DVD-Audio, Dolby Digital, DTS or MPEG audio is downmixed, for example to two channel stereo
- 17 **DIGITAL** – Lights when a disc with Dolby Digital audio is playing
- 18 **GRP** – Indicates that the number below in the character display is a DVD-Audio group number
- 19 **TITLE** – Indicates that the number below in the character display is a DVD-Video title number
- 20 **SACD** – Lights when a Super Audio CD (SACD) is loaded
- 21 **CD** – Lights when a CD is loaded
- 22 **TRK** – Indicates that the number below in the character display is a DVD-Audio, CD, Super VCD/Video CD or MP3 track number
- 23 **CHP** – Indicates that the number below in the character display is a DVD-Video chapter number
- 24 **Character display**
- 25 Lights when a disc with DTS audio is playing
- 26 Lights when playing a disc with TruSurround switched on



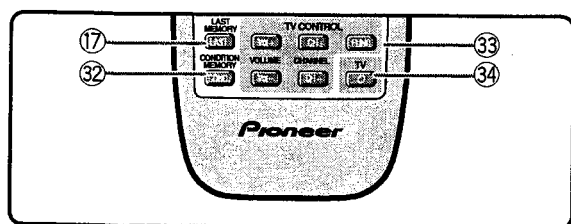
# DV-47A, DV-S733A, DV-747A

## 8.1.3 Remote Control

### DV-S733A, DV-747A



### DV-47A

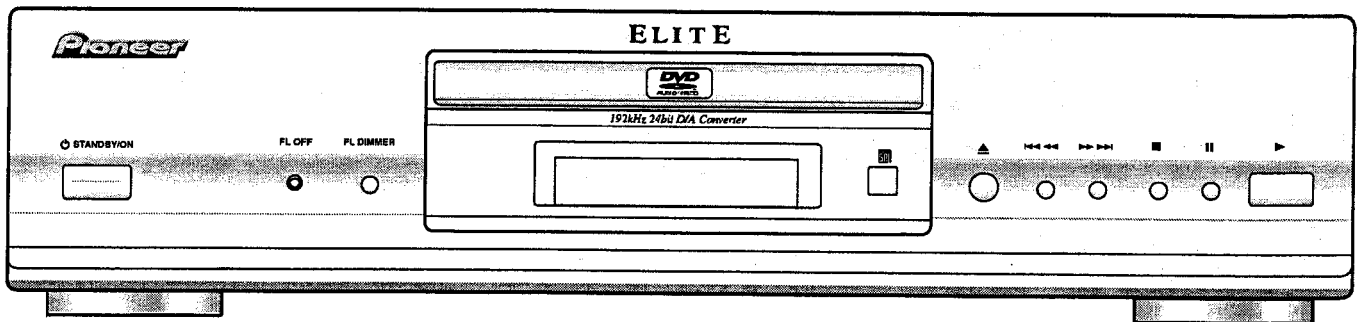


- 1 **MENU**
- 2 **⏻** – switches player on or into standby.
- 3 **AUDIO**
- 4 **DISPLAY**
- 5 **SETUP**
- 6 **MULTI DIAL**
- 7 **LIGHTING** – press to illuminate buttons 8, 9, 10, 11, 23, 25, 26
- 8 **V.ADJ** – Video adjust
- 9 **F.MEM** – Function memory
- 10 **▶** – Play
- 11 **■** – Stop
- 12 **⏮ ⏭** – Skip
- 13 **↺** – Return
- 14 **◀ || || ▶** – Frame advance/slow motion
- 15 **Number buttons**
- 16 **RANDOM**
- 17 **LAST MEMORY**
- 18 **▲** – Disc tray open/close
- 19 **SUBTITLE**
- 20 **ANGLE**
- 21 **TOP MENU**
- 22 **Joystick / ENTER button**
- 23 **FL** – Press to change the display brightness
- 24 **Jog indicator** – lights when multi dial is in jog mode
- 25 **JOG**
- 26 **||** – Pause
- 27 **⏮ ⏭** – Scan
- 28 **SEARCH MODE**
- 29 **C** – Clear
- 30 **PROGRAM**
- 31 **REPEAT — A-B**
- 32 **CONDITION MEMORY**
- 33 **TV CONTROL buttons**  
**VOLUME** – Use to adjust the volume.  
**CHANNEL** – Use to select TV channel.  
**FUNC** – Press **FUNC** to select the TV for remote control operation.
- 34 **⏻ TV button** – Press **⏻ TV** to turn the TV's power on or put in standby.

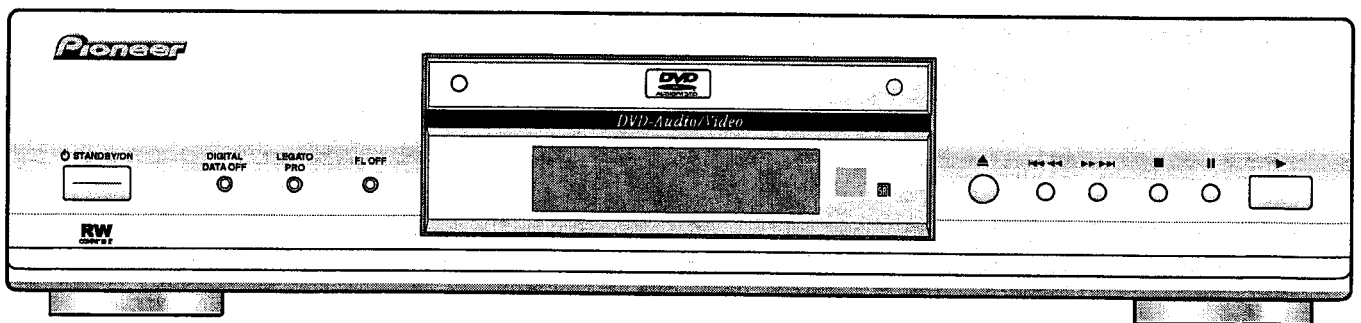


### 8.1.4 Front View

#### ■ DV-47A



#### ■ DV-S733A, DV-747A

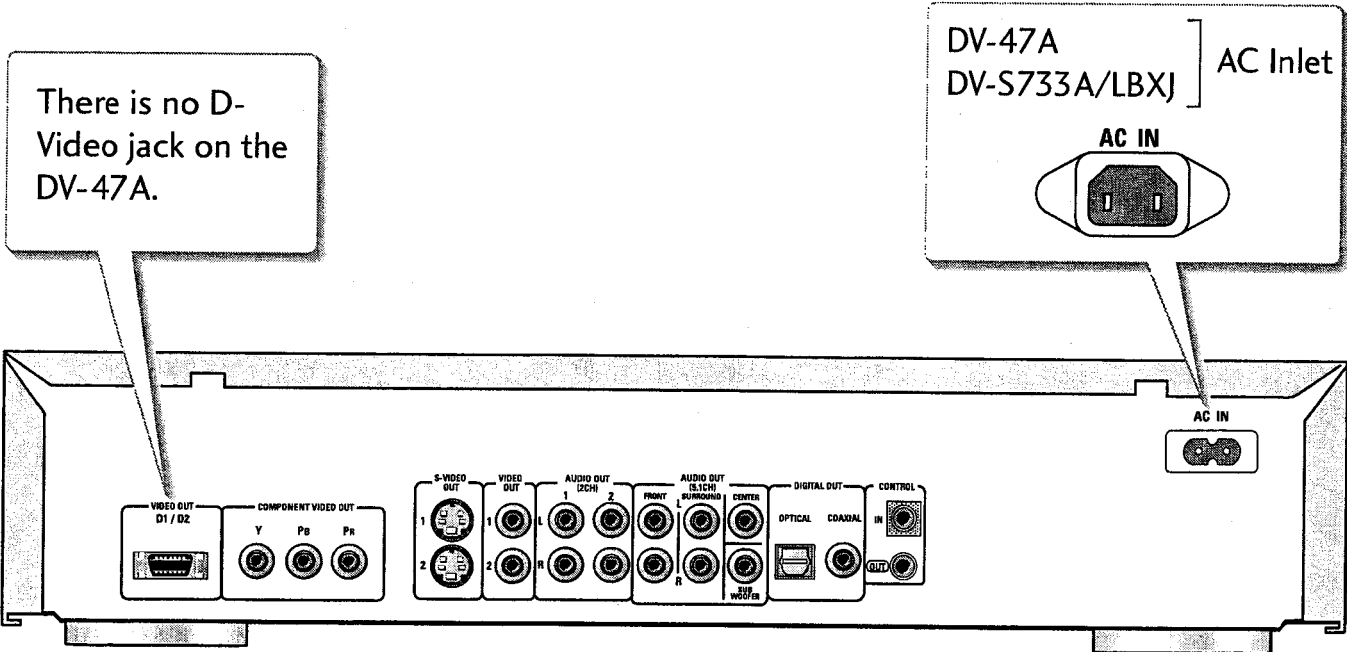




DV-47A, DV-S733A, DV-747A

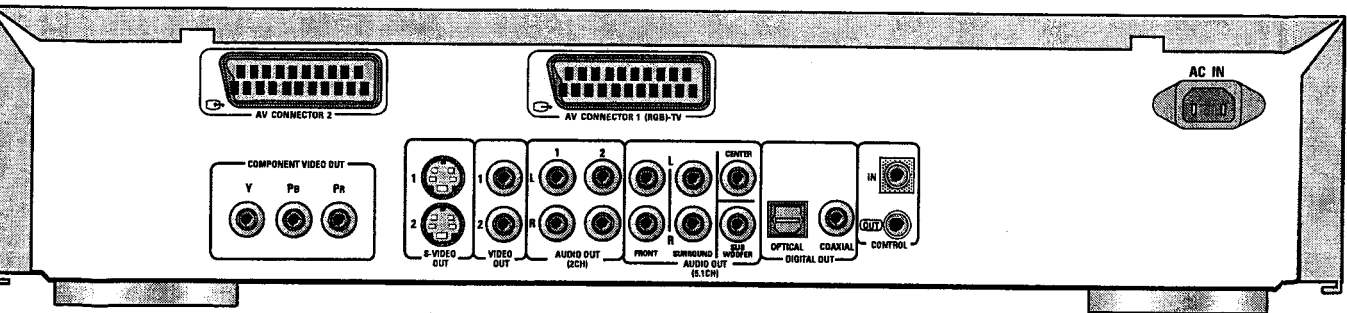
8.1.5 Rear View

■ DV-47A, DV-S733A



DV-S733A

■ DV-747A





## 8.2 SPECIFICATIONS

### ■ DV-47A, DV-S733A

#### General

##### System

... DVD-Video, DVD-Audio, DVD-R/RW, Super VCD, Video-CD, SACD, CD and MP3 files

##### Power requirements

DV-47A ..... 120 V, 60 Hz

##### DV-S733A

Taiwanese model ..... 110 V, 60 Hz

Other models ..... 220-240 V, 50/60 Hz

Power consumption ..... 14 W

##### Power consumption in standby mode

DV-47A ..... 0.3 W

##### DV-S733A

Taiwanese model ..... 0.3 W

Other models ..... 0.5 W

##### Weight

DV-47A ..... 4.2 kg (9 lb 4 oz)

DV-S733A ..... 4.5 kg

##### Dimensions

DV-47A ..... 420 (W) x 277 (D) x 97.5 (H) mm  
(16 <sup>9</sup>/<sub>16</sub> (W) x 10 <sup>15</sup>/<sub>16</sub> (D) x 3 <sup>7</sup>/<sub>8</sub> (H) in.)

DV-S733A ..... 420 (W) x 278 (D) x 97.5 (H) mm

Operating temperature ..... +5°C to +35°C (+36°F to +96°F)

Operating humidity ..... 5% to 85% (no condensation)

#### S-Video output (2 individual outputs)

Y (luminance) - Output level ..... 1 Vp-p (75 Ω)

C (color) - Output level ..... 286 mVp-p (75 Ω)

Jacks ..... S-VIDEO jack

#### Video output (2 individual outputs)

Output level ..... 1 Vp-p (75 Ω)

Jacks ..... RCA jack

#### Component video output (Y, Pb, Pr)

Output level ..... Y: 1.0 Vp-p (75 Ω)

Pb, Pr: 0.7 Vp-p (75 Ω)

Jacks ..... RCA jacks

#### D1/D2 video output (DV-S733A only)

Output level ..... Y: 1.0 Vp-p (75 Ω)

Pb, Pr: 0.7 Vp-p (75 Ω)

Jacks ..... D terminal

#### Audio output (2 pairs)

##### Output level

During audio output ..... 200 mVrms (1 kHz, -20 dB)

Number of channels ..... 2

Jacks ..... RCA jack

#### Audio output (multi-channel / L, R, C, SW, LS, RS)

##### Output level

During audio output ..... 200 mVrms (1 kHz, -20 dB)

Number of channels ..... 6

Jacks ..... RCA jack

#### Digital audio characteristics

Frequency response ..... 4 Hz to 44 kHz (DVD fs: 96 kHz)

4 Hz to 88 kHz (DVD-Audio fs: 192 kHz)

S/N ratio ..... 118 dB

Dynamic range ..... 108 dB

Total harmonic distortion ..... 0.001 %

Wow and flutter . Limit of measurement (±0.001 % W. PEAK) or lower

#### Digital output

Optical digital output ..... Optical digital jack

Coaxial digital output ..... RCA jack

#### Other terminals

Control in ..... Minijack (3.5 ø)

Control out ..... Minijack (3.5 ø)

#### Accessories

Audio cable ..... 1

Video cable ..... 1

Remote control unit ..... 1

"AA" size (R6P) batteries ..... 2

Power cord ..... 1

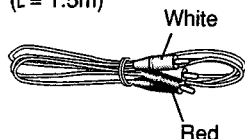
#### Operating Instructions

*Note: The specifications and design of this product are subject to change without notice, due to improvement.*

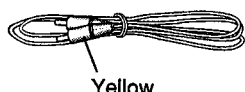
- Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories. Confidential Unpublished Works, © 1992-1997 Dolby Laboratories. All rights reserved.
- "DTS" is a trademark of Digital Theater Systems, Inc.

## ● Accessories

- Audio Cable (VDE1052)  
(L = 1.5m)



- Video Cable (VDE1053)  
(L = 1.5m)



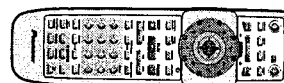
- Power Cord  
(DV-47A : ADG7061)  
(DV-S733A/LBXJ : ADG7060)



- Power Cord  
(DV-S733A/WLXJ/NC, WLXJ/RD : ADG1154)



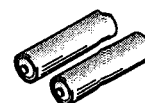
- Remote Control Unit  
(DV-47A : VXX2714)



- Remote Control Unit  
(DV-S733A : VXX2713)



- Dry Cell Battery (R6P, AA)





# DV-47A, DV-S733A, DV-747A

## ■ DV-747A

### General

#### System

..... DVD-Video, DVD-Audio, DVD-R/RW, Video-CD, SACD, CD and MP3 files

Power requirements ..... 220-240 V, 50/60 Hz

Power consumption ..... 15 W

Power consumption in standby mode ..... 0.5 W

Weight ..... 4.6 kg

Dimensions ..... 420 (W) x 97.5 (H) x 278 (D) mm

Operating temperature ..... +5°C to +35°C

Operating humidity ..... 5% to 85% (no condensation)

### S-Video output (2 individual outputs)

Y (luminance) - Output level ..... 1 Vp-p (75 Ω)

C (color) - Output level ..... 286 mVp-p (75 Ω)

Jacks ..... S-VIDEO jack

### Video output (2 individual outputs)

Output level ..... 1 Vp-p (75 Ω)

Jacks ..... RCA jack

### Component video output (Y, P<sub>B</sub>, P<sub>R</sub>)

Output level ..... Y: 1.0 Vp-p (75 Ω)

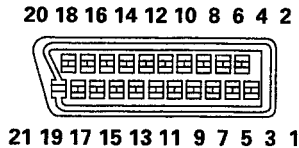
..... P<sub>B</sub>, P<sub>R</sub>: 0.7 Vp-p (75 Ω)

Jacks ..... RCA jacks

### 21-pin connector assignment

AV connector input/output ..... 21-pin connector

This connector provides the video and audio signals for connection to a compatible color TV or monitor.



#### PIN no.

1	Audio 2/R out	11	G* out
3	Audio 1/L out	15	R* or C* out
4	GND	17	GND
7	B* out	19	Video out or Y* out
8	Status	21	GND

\* AV CONNECTOR 1 (RGB)-TV is output  
AV CONNECTOR 2 is not output

### Audio output (2 pairs)

#### Output level

During audio output ..... 200 mVrms (1 kHz, -20 dB)

Number of channels ..... 2

Jacks ..... RCA jack

### Audio output (multi-channel / L, R, C, SW, LS, RS)

#### Output level

During audio output ..... 200 mVrms (1 kHz, -20 dB)

Number of channels ..... 6

Jacks ..... RCA jack

### Digital audio characteristics

Frequency response ..... 4 Hz to 44 kHz (DVD fs: 96 kHz)

..... 4 Hz to 88 kHz (DVD-Audio fs: 192 kHz)

S/N ratio ..... 118 dB

Dynamic range ..... 108 dB

Total harmonic distortion ..... 0.001 %

Wow and flutter

..... Limit of measurement (±0.001% W. PEAK) or lower

### Digital output

Optical digital output ..... Optical digital jack

Coaxial digital output ..... RCA jack

### Other terminals

Control in ..... Minijack (3.5 ø)

Control out ..... Minijack (3.5 ø)

### Accessories

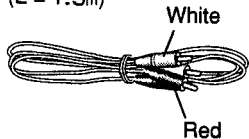
Audio cable	1
Video cable	1
Remote control unit	1
"AA" size (R6P) batteries	2
Power cord	1
Operating Instructions	1
Warranty card	1

*Note: The specifications and design of this product are subject to change without notice, due to improvement.*

- Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories. Confidential Unpublished Works, © 1992-1997 Dolby Laboratories. All rights reserved.
- "DTS" is a trademark of Digital Theater Systems, Inc.

## ● Accessories

- Audio Cable (VDE1052)  
(L = 1.5m)



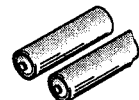
- Power Cord  
(ADG7062)



- Remote Control Unit  
(VXX2785)



- Dry Cell Battery (R6F, AA)



- Video Cable (VDE1053)  
(L = 1.5m)

